

# BUTANE-PROPANE

## News

Headquarters for L.P. gas Information Since 1931

SEPTEMBER, 1954

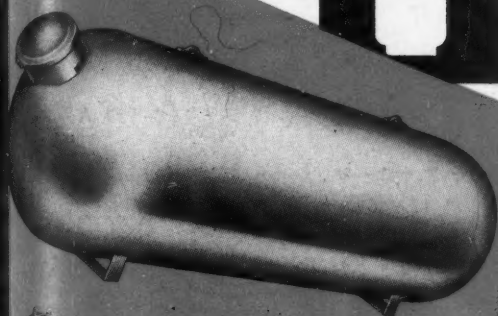
STOCK  
Technology

**BPN**

FIFTY CENTS PER COPY

Seattle Public Library

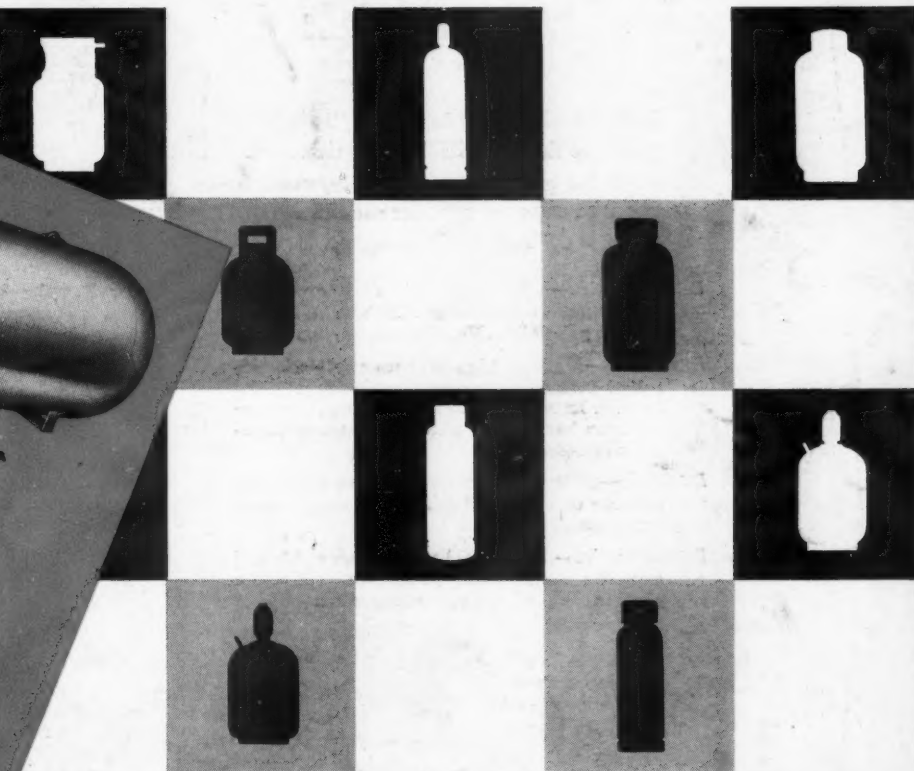
SEP 2 1954



TYPE EA 1,000 A



TYPE TA 500 A



ACCEPTED NEWCOMERS TO A QUALITY LINE

**SCAIFE FUEL PACK ASME ABOVE-GROUND TANKS**

...FEATURING

**7** IMPORTANT  
ADVANTAGES

1. New Exclusive Lock Lid
2. Sturdy Valve Protection Ring
3. ASME Data Clearly Stamped on Valve Protection Ring
4. Two Extra Strong Lifting Lugs
5. Tank Constructed of Light-Weight, High-Strength Steel
6. Fuel Level Gauge Positioned for Easy Inspection
7. Extra Strong Tank Supports, Integrally Welded to the Tank



SCAIFE COMPANY

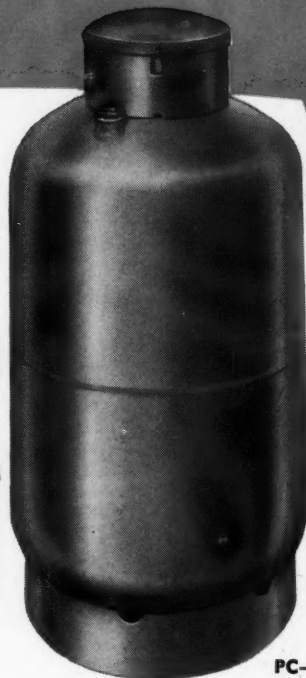
DAKOTA (PITTSBURGH DISTRICT) FIRM



SALES OFFICES: CHICAGO, PITTSBURGH, NEW YORK, ATLANTA, RIDGEWOOD, N.J.

# BIG ON VALUE

BIG-sized Hackney LP-Gas Cylinders give you the same BIG values that have made the famous Hackney 100-pound propane capacity cylinder the most popular cylinder in the industry.



PC-420 A

**Extra Protection**—against rusting and corrosion. Service-tested undercoating. Can furnish all sizes hot dip galvanized. Ventilated foot ring.

**Extra Strong**—Made of high-strength steel—scientifically heat-treated for greater resistance to hard knocks. Extra-heavy foot ring. Two-piece construction has one-third the seam area of three-piece cylinders.

**Extra Light**—Hackney two-piece deep drawn cylinders are easy to handle—their low tare weight saves transportation costs.

**Extra Attractive**—Streamlined shape. Neat welds and smooth surfaces, evenly painted—all add to the good looks your customers appreciate.

**Extra-Clear Stamping**—Hackney "depth-controlled" stamping is always easy to read—saves time—prevents errors. If desired, company name can be permanently embossed with large raised letters in protection collar.

**EXTRA SAVINGS**—Hackney extra values reduce handling and maintenance costs—give you more value for your cylinder dollar.

Write for additional information on Hackney vertical and horizontal cylinders for permanent installations.

Protection collar, showing embossed name for easy identification.



RH-300 A



## Pressed Steel Tank Company

Manufacturer of Hackney Products

1487 S. 66th St., Milwaukee 14  
52 Vanderbilt Avenue, Room 2099, New York 17  
227 Hanna Bldg., Cleveland 15  
936 W. Peachtree St., N.W., Room 112, Atlanta 3

208 S. LaSalle St., Room 790, Chicago 4  
552 Roosevelt Bldg., Los Angeles 17  
18 W. 43rd St., Room 13, Kansas City 11, Mo.  
138 Wallace Ave., Downingtown, Pa.

Downingtown Iron Works, Inc., Division  
Downingtown, Pennsylvania

LP-GAS CONTAINERS FROM ONE POUND TO 30,000 GALLONS





# This Little 'Pig' went to Market . . . . .

and made a  
fat profit for the  
**DEALER!**



comes with  
C. C. 4BA-240  
Specifications

ANCO PIGS make BIGGER profits for you, the dealer, through "packaged sales." The "Pig" is the ideal unit to sell new customers in connection with a range, water heater, or any other type of appliance. Perfect for light domestic loads . . . ideal for motels . . . cafes . . . excellent for industrial and farm standby units . . . wonderful for tractor refueling.

## specifications:

Weight.....280 lbs.  
(approx.)  
Length.....45"  
Diameter.....32"  
Capacity.....949 lbs.  
(Water capacity approx.  
114 water gals.)

Safety relief valve set at 375 pounds.  
Fitted with the following U.L. ap-  
proved fittings:

Regulator..... $\frac{1}{4}$ " Outage  
House Line Valve... $\frac{1}{4}$ " Filler Valve  
Visual LL Gauge... $\frac{3}{4}$ " Vapor Return



Stocked at: Tulsa • East St. Louis • Omaha

**ANCO Manufacturing & Supply Co.**  
217 East Archer Tulsa, Okla.

Minneapolis, Minn.

Omaha, Neb.

East St. Louis, Ill.

SEPTEMBER 1954

# BUTANE-PROPANE

## News

NBP

VOLUME 16 • NUMBER 9

### Contents

Push Out Your Fringe Area .....	37
<i>Joseph A. White</i>	
Rocking K—Stretches Its Guest Season	
By Converting to LPG .....	39
<i>Bob Frank and Carl Abell</i>	
Radiant Baseboard Heating Beats the Competition	
For This Portland Dealer .....	42
<i>Benedict Kruse</i>	
How Does the Current Tax Bill Affect You? .....	44
<i>J. C. Dockeray</i>	
Propane Fires the Plumber's Torch .....	47
<i>Dean Smith</i>	
Tungsten Means "Plus" Business for Arapahoe Gas .....	48
<i>J. Arthur Thompson</i>	
Hot Water for Rent .....	50
Testimonial Advertising Can Sell LPG .....	54
Don't Cut Prices .....	56
Civic Activities Can Mean Big Business .....	58
<i>Emmett Maum</i>	
Service First — Sales Later .....	62
White Makes \$100,000 on Appliances .....	66
<i>Ruel McDaniel</i>	
Safety in Installing and Operating Carburetor Systems,	
Safety Article No. 20 .....	74
<i>Carl Abell</i>	
The Budget, Instrument of Destruction or Vital Tool? .....	90
<i>Irving Elbaum</i>	
Southern Tech. Fits Men for Gas Industry Futures .....	96
Protect Our Greatest Asset .....	160
<i>Walter Naumer</i>	
<b>Power</b>	
Taxi Totals 260,000 Miles in Durability Test .....	162
<i>Carl Abell</i>	
Santa Monica Butane Co. Handles Carburetion	
and Fuel Sales .....	164
LPG Reduces Fire Hazard in Lumber Yard Fleet .....	167
Butane Fires Equipment on the Williams Plantation .....	168
Propane Reduces Maintenance for Meridian .....	170
<i>W. M. Massey</i>	

### DEPARTMENTS

Advertisers Index .....	176	Letters .....	29
Associations .....	110	New Products .....	100
Beyond the Mains .....	33	News .....	126
Calendar .....	116	Power .....	161
Classified .....	174	The Trade .....	118



A JENKINS PUBLICATION

#### Executive

Jay Jenkins, President and Publisher  
Paul Lady, General Manager  
Stanley K. Siwak, Circulation Manager  
Gilbert Bowman, Sales Promotion  
Gene Masters, Research

#### Editorial

Carl Abell, Editor  
Lynn C. Denny, Associate Editor  
William W. Clark, Editorial Director  
Lester L. Luxon, Technical Editor  
Beverly T. Watkins, Managing Editor  
Raymond A. Grote, Art Editor

#### Publication Office

Los Angeles (57)—198 So. Alvarado St.  
Phone DUnkirk 7-4337

#### Advertising Offices

New York (36)  
11 W. 42nd St., Room 774  
Peter Wile, District Mgr.  
Phone CH 4-1969

Chicago (1)—333 N. Michigan Ave.  
Wm. O. Dannhausen, District Mgr.  
Phone FRanklin 2-4615

Cleveland (15)—1836 Euclid Ave.  
Frank J. Enright, District Mgr.  
Richard L. DeMuesy, Asst. District Mgr.  
Phone PRospect 1-4584

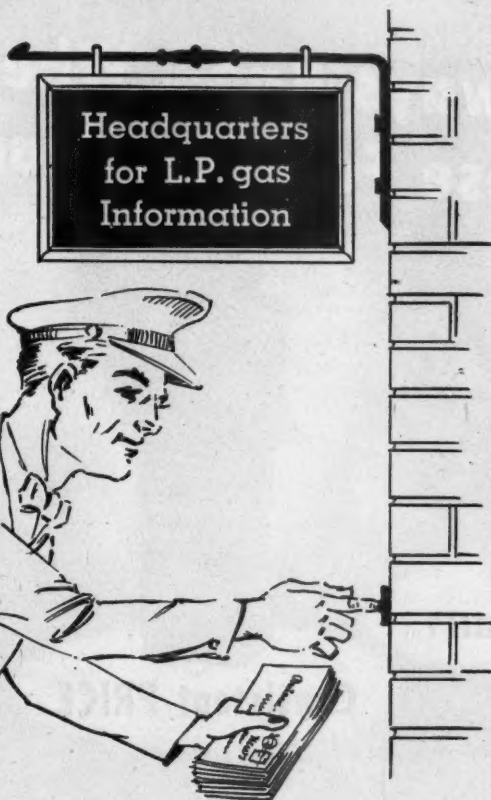
Tulsa—P.O. Box 4055  
Craig Espy, District Mgr.  
2441 E. 25th Pl.—Phone 7-9807

Los Angeles (57)—198 S. Alvarado St.  
Joseph R. Geryk  
Phone DUnkirk 7-4337

BUTANE-PROPANE News is published monthly. Copyright 1954 by Jenkins Publications, Inc., at 198 So. Alvarado St., Los Angeles 57, California. Subscription price: United States and U. S. possessions: 50c per copy; one year, \$2; two years, \$3. Canada and Mexico: one year, \$4; two years, \$7. South and Central America, Caribbean area: one year, \$6. All other countries, \$10 per year. Entered as second-class matter May 29, 1939, at the post office at Los Angeles, California, under the Act of March 8, 1879. Member of Audit Bureau of Circulation, Business Publications Audit of Circulation, Inc., Liquefied Gas Assn., National Fire Protection Assn.

Publishers: GAS, The Magazine of the Gas Utility Industry; HANDBOOK BUTANE-PROPANE GASES; THE BOTTLED GAS MANUAL; BUTANE-PROPANE POWER MANUAL; Annual BUTANE-PROPANE News CATALOG; LPG BULK PLANT MAILING LIST SERVICE; WESTERN METALS. The name "BUTANE-PROPANE News" is registered, U. S. Patent Office.

# LETTERS



## For Better Mileage

*North Dakota*

We have converted over to propane a 1954 Chevrolet truck, with a 261 cu. in. Jobmaster engine. The compression ratio on this engine is 7.17:1 so we did not increase the ratio in any way. We did install a special cold manifold, and we advanced the timing according to an engine tachometer until the engine ran the fastest. The customer is only getting five miles to the gallon.

Can you give us any special recommendations for this engine so as to improve the mileage? The truck is hauling gravel with about an average payload of 7 to 8 tons.

E.E.M.

By using an exhaust gas analyzer as indicated in the *Butane-Propane Power Manual*, make sure that the carburetor adjustment is correct in both the power and economy ranges.

You did not mention the make of carburetor in use but we would suggest, if you have not done so, that you equip this truck with a straight L. P. gas carburetor having ample throat capacity to supply the maximum charge that the manifold can take.

If the carburetor is undersize for the job, as would be the case in an adapted gasoline carburetor, then we would expect to be running on the power adjustment most of the time in carrying the loads which you indicate. This would definitely be cause for high fuel consumption.—Ed.

## Standby Plants

*Ohio*

I would like some information on propane standby or peak shaving if you have some available for 1000 Btu natural gas at .6 gravity.

J.H.M.

Chapter 6 of our *Handbook Butane-Propane Gases* entitled "Enrichment, Peak Load, and Standby Uses," page 247, discusses the use of L. P. gas for these purposes.

Also the American Gas Association, 420 Lexington Ave., New York City, may have considerable information regarding these uses. We suggest you write to them and request a bibliography covering propane standby and peak shaving for 1000 Btu natural gas at .6 gravity, as you noted in your letter. From the bibliography you can order the publication or article which you may consider most desirable.—Ed.

## High Compression

*Wisconsin*

I have a 1954 Ford truck with the 138 hp Power King V-8 (256 cu. in. displacement) engine. I want to connect this engine to straight propane.

Would you kindly give me the information as to what should be done toward converting this engine (raising the compression ratio).

We have Dodges and Fords operating on propane and they work out fine.

G.L.J.

We know of a few cases where this has been done without changes to the engine and the results have been excellent.

By replacing the standard gasoline carburetor with a straight LPG carburetor, there seems to be very little loss of power and the increase in fuel consumption is not serious. If you have occasion to high compression one of these engines, we would greatly appreciate report of your experiences.—Ed.

## Strapping Tables

*Alabama*

In delivering gas to our customers our drivers frequently find tanks equipped with slip tubes.

We are in need of strapping table information to enable them to ascertain contents of such tanks, particularly as related to 150-, 250-, 500-, and 222-gal. tanks.

E.M.G.

The manufacturers of the tanks should be able to supply the strapping tables for those which you have. It is a long and tedious job to calculate a strapping table, and requires accurate inside dimensions of both the cylindrical portion and the heads to make an accurate table.

A graph on page 318 of the *Handbook Butane-Propane Gases*, 1951 edition, provides a reasonably accurate method of converting the depth of liquid to percent of water capacity.—Ed.


## LPG and Competition

*Georgia*

In performing a study of the L. P. gas industry, I have run across a few questions that I thought might be best answered by you. To a member of the industry these questions are probably elemental, but to the lay person the answers should be illuminating.

First, what are the chief sources of competition to L. P. gas in the domestic field? How does L. P. gas measure up to its competition on a cost per unit basis? Chiefly, I am desirous of learning where the strongest sources of competition lie and just how the L. P. gas industry can ex-





**You Always Know Where  
these Furnaces Stand**

**Consistent QUALITY**

**Consistent PRICE**

# SEQUOIA

makes forced air gas equipment you can depend upon . . . and on today's far more competitive market, consistency is noteworthy.

Inside a SEQUOIA furnace still go parts of industry-recognized highest quality — GE, M-H, Dust-Stop, General, etc. That's important now! And so is price stability, and SEQUOIA's guarantee that continues to back its dealers to the hilt! True, you can buy less expensive furnaces for your L.P. heating jobs than SEQUOIA *Closesteer* (upright), *Rev-flo* (counter-flo) or *Horizontal*. But you can never buy better quality at competitive prices. This all-around dependability . . . so important to heating dealer, builder and architect alike . . . has been earned in years of consistent manufacturing quality.

FOR FULL INFORMATION ON INDIVIDUAL MODELS, OR THE COMPLETE LINE, CONTACT ANY SALES OFFICE:

RICHMOND, VA., Jack Muther, 1504 Belleville St.

NEW ORLEANS, C. Rollins Brown, 4508 Drex Avenue

ST. LOUIS, J. R. Layton, 5762 DeGiverville Avenue

AKRON, OHIO, Harry O. Donnelly Co., 33 Frank Blvd.

OKLAHOMA CITY, Guy W. Gentry, Post Office Box 7131

DALLAS, Bob Sheveland, 1208 National City Building

PASADENA, John S. Padrick, 15 N. Oakland Avenue

*Sales Department*

**SEQUOIA MANUFACTURING CO.**

1000 Brittan Avenue • San Carlos 5, California

*Stocks maintained in many major cities.*

pect to react to such competition.

What are the production sources of butane and propane? I have learned that both are by-products of petroleum refining and natural gas. If this be so, why is the amount supplied by the petroleum refining industry to L. P. gas retailers decreasing each year?

How do the thermal capacities of propane, butane, methane and ethane compare? Are there any material differences between the four in respect to their uses for domestic and industrial uses? And finally, is the supply of tanks and cylinders sufficient for the industry, or could this become a rather critical area of the industry?

A.A.H.

The fuels which are competitive to L. P. gas in this country vary, of course, with the service which is to be performed. Natural gas, manufactured gas, electricity and to some extent oil, coal, wood and other solid fuels are competitive for cooking and water heating. Natural gas and manufactured gas take over in the cities and some urban or rural areas where they are available.

On the other hand, many large utilities augment their natural or manufactured gas supply with L. P. gas during periods of peak demand. New York, Chicago, Philadelphia, Detroit, Portland, San Diego and many more are examples. Many small cities and towns are supplied with L. P. gas piped the same as natural or manufactured gas.

Oil, coal and other solid fuels are more competitive for space heating. Coal and wood are competitive only in the areas where they are available or where transportation costs do not provide too great a burden. Even then L. P. gas often takes over because it is more efficient, better controlled, cleaner and does not require expensive building space for storage.

L. P. gas as a competitive fuel is partly answered in the foregoing paragraphs. On strictly a price per unit quantity of heat content basis, it is seldom as low as other fuels, but is usually below electricity. However, its convenience, efficiency, cleanliness, dependability and other excellent features sell it over competitive fuels—often right in their own back yards. Electricity suffers because of cost and power failures; coal is dirty, hand firing is dirty and inefficient, automatic stokers are noisy and require electric power which often fails, requires valuable storage space and disposal of ash. Combustion is less efficient. Oil has some of the same disadvantages. L. P. gas requires no other power or utility for its use. It is like gas served by a utility.

We cannot give you comparative cost figures because prices of L. P. gas and the competitive fuels vary throughout the country.

Butane and propane are obtained from natural gas, from natural gasoline plants and oil refineries. We cannot agree that the supply of L. P. gas to the retailers has been decreasing year by year. On the contrary, it has increased every year since it first started to be a major fuel in 1925. Some years have seen a swing between the relative amounts of butane or propane available, due to the use of butane for chemicals, rubber and high octane gasoline production.

The thermal capacities of the four gases you mention are as follows:

	Methane	Ethane	Propane	n-Butane
Btu per cu ft gas.....	1,011	1,771	2,521	3,267
Btu per lb.....	23,920	22,350	21,690	21,340
Btu per gal. liquid at 60° F.....		69,900	91,300	103,000

Actually, there is little difference among the four hydrocarbons listed above in respect to their use as domestic fuels. Methane is the chief constituent of natural gas (usually 75% or more); ethane is the second largest constituent of natural gas (10% to 20%, generally), with carbon dioxide, nitrogen and other natural gases in minute quantities.

The same burners, controls, gas meters, regulators, etc., with minor variations, are used for either natural or L. P. gases.

There have been periods during the war years when tanks and cylinders have been in short supply. Of course, this can happen again, but it is doubtful if it will ever be a problem in normal periods.—Ed.

## Converting Truck to LPG

California

We have a customer who is interested in converting his 1953 ¾-ton Dodge pickup to L. P. gas. Can you give us any information relative to a recommended compression increase through milling of the head and how much metal to be removed?

We wish this job to be as near perfect as possible inasmuch as very few light trucks use L. P. gas in our locality and there is a good potential in future business.

I.F.K.

It will cost very little more to replace the Dodge engine head with the standard Plymouth passenger car head and we would suggest that this would be better procedure than milling the original head. It will increase the compression approximately three-fourths of one ratio.

We suggest that you be extremely careful in setting the ignition timing after the head is changed, following one or another of the procedures outlined in the Butane-Propane Power Manual. When you get through, the ignition timing should be set exactly where it produces maximum power on L. P. gas.—Ed.

## LPG on Work Trains

West Virginia

A local railway company has made inquiry as to the cost of installing bottled gas on their work trains. Each train will consist of a diesel engine, tender for carrying gas tank, cook and dining cars and three to four sleeping cars.

Would appreciate any suggestions from you as to what equipment to use.

I.M.C.

Gas is regularly used by many railroad companies as fuel on their dining cars and for fuel to the internal combustion motors which furnish power to operate the generators and air conditioning units on the cars of their passenger trains.

Cylinders securely held in a cabinet or other suitable cradle under the car is the most general method of supply them. The cylinders are generally ICC type cylinders, perhaps a little shorter and larger in diameter, as space limitations require.

The vapor outlet and relief valve connections must be so arranged inside the cylinder that they connect with the vapor space to prevent liquid from coming out through them. See the picture, Figure 20, on page 274 of the "Handbook Butane-Propane Gases."

It may be possible to locate the cylinders on a platform or in the vestibule of a car if it is a work train. However, under no conditions should they be placed inside a car. Sturdy and secure supporting brackets must be provided.

Standard L. P. gas regulators may be used with standard pipe or tubing from it to the appliances. However, the pipe or tubing must be well supported and protected. Joint and union connections must be of a type that will not loosen and cause leaks. The manifolding from the cylinders to the regulators must be heavy duty with strong, flexible type connectors between the cylinders and the manifold piping. Cylinders, manifolding, regulators and piping should be shielded with adequate sheet metal or other durable material to protect them from flying rocks or other objects.

Your letter indicates there is some consideration given to placing cylinders on a tank on a tender car and piping the gas to the various units. This should not be done because the train has to be uncoupled and coupled. Couplings are available that lock off on both sides when disconnected by hand, but someone can forget and the coupling would be torn apart. Also, disconnected cars would be without fuel.

We believe you may find some of the trains in your part of the country already equipped with L. P. gas, which will serve as a guide for your project.—Ed.

## Thin Copper Gaskets

Utah

Do you know how those thin copper gaskets (.010) are working out in the reworking of tractor and truck engines for higher compression?

Do they hold the compression and water as well as the regular gaskets, and do they give sufficiently high compression for use with propane?

A.C.J.

The only recent reports we have had of successful use of thin copper gaskets are from race car engines in which the surfaces of the block and head are precision ground. In ordinary production engines these surfaces are covered with tool marks and it is extremely difficult to make the thin gaskets hold either the gas pressure or the water.

The gain in compression ratio made possible by using the thinner gasket is rather small and it is our belief that more satisfactory results could be obtained by planing the head or installing higher pistons, depending on which is the proper way to raise the compression in that particular engine.—Ed.

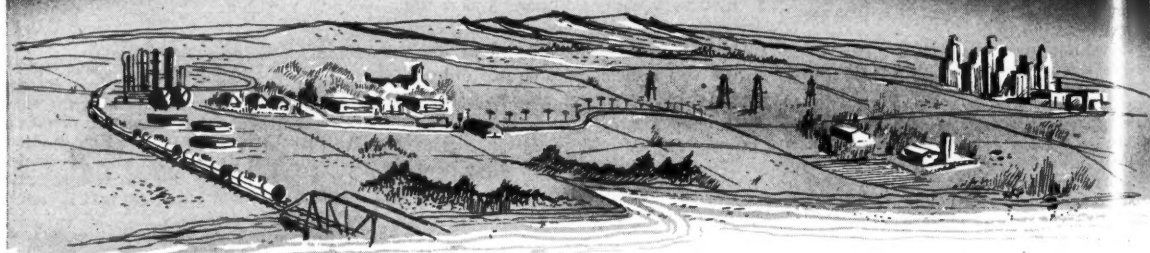
"HITCH YOUR 'WAGON' TO A STAR"



... and get **DEPENDABLE LP-GAS** service!

Your customers will be assured of dependable LP-Gas service when your bob-tails and transports are hitched to Tuloma. The key is availability, and from 30 supply points in 10 states, Tuloma LP-Gas is **ALWAYS** available.

Tuloma's service means more than a dependable supply, it means assistance from trained personnel ready to help you with your operations whatever the requirements. You'll find it profitable to "Hitch your 'wagon' to Tuloma."



**TULOMA GAS PRODUCTS COMPANY**

*A Wholly Owned Subsidiary of Standard Oil Company (Indiana)*

PHONE 2-3261 • BOX 591 • STANOLIND BUILDING • TULSA 2, OKLAHOMA





# Beyond the Mains

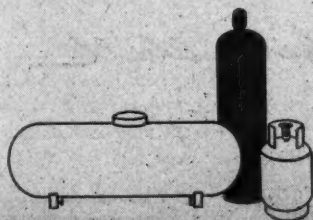
HOW WELL DO YOU KNOW YOUR BANKER? More important, how well does he know you and your business? This could become very important, particularly in the part of the country that is currently suffering from the third dry year in succession.

The majority of country banks are old institutions, still following the loan traditions of the past. Too many of them today view with some skepticism the growing investments in mechanization and installations for the sake of convenience, which the farmers have been forced to make to substitute for rural help that is no longer available.

Every banker should be made to realize that your business is not only basic to local welfare, but that the economies which it makes possible in farming operations places greater security behind the mortgages and crop loans which still form the backbone of the rural credit system. They should be made to see that a reduction in operating costs frequently makes the difference between being able to meet payments on the long term loans and the necessity for extension or foreclosure.

IN THIS AGE OF MECHANIZATION equipment loans are becoming a more important part of every banker's accounts receivable. Your banker should know that the longer life and lower maintenance cost of the power plants used in farming help to maintain the soundness of such loans, and that the resale of a machine in top mechanical condition protects a loan by giving it a higher resale value.

Our present cycle of dry years will be reversed in the not too distant future. Good crop years will follow. Rural customers will have money to buy what they need, which will make it necessary for L. P. gas distributors to expand their operations, and stock more merchandise. Somewhere along the line they will need more finances to handle increasing volume. Borrowing power does not develop over night. It builds up through repeated satisfactory experiences. What you do now in acquainting your banker with your business may have its greatest usefulness in the good years to come.



Continued... →

Continued ...



## Beyond the Mains

IRRIGATION IS WORKING A MAJOR REVOLUTION IN SOUTHERN AGRICULTURE. And who do you think is most active in promoting it? You are right. The electric companies have taken the bit in their teeth and are bringing the benefits of assured crops every year to the farmers and plantation owners throughout the drought-stricken area.

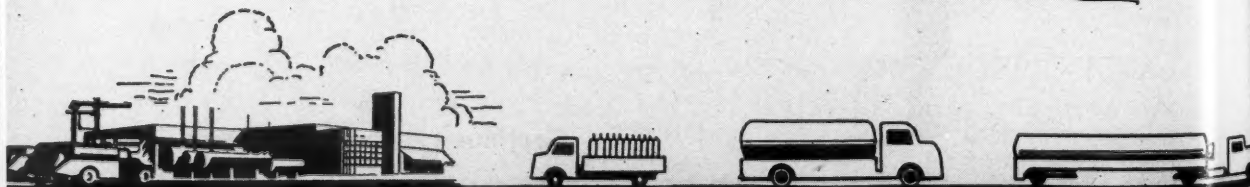
LPG distributors are making progress along this line, spasmodically and in limited areas, but their sales efforts do not compare with the country-wide coverage of the electrical industry. The reason for this difference is the same as that for the terrific growth of domestic service from the power line -- consistent and sustained programs for merchandising that kind of service.

LPG IS A BETTER AND CHEAPER SOURCE OF PUMPING POWER THAN ELECTRICITY almost everywhere you go. The propane powered pump is not tied down to a power line. There are no high costs for planting poles and stringing wires to wells, rivers or lakes. There are no standby charges to insure having power at the pump when it is needed. Where electric power and propane can both be bought at average prices, the propane pump costs less when it is in use, and it costs nothing when it is idle.

We note that there is increasing use throughout the south of sprinkler type irrigation systems. Many of these require two pumps -- a low pressure pump to bring the water to the sprinkler line, and a high pressure pump to operate the sprinklers. The sprinkler lines, made of light weight aluminum pipe, move from location to location in the field, and from field to field. A trailer mounted pump, engine, and fuel tank can move about as the need arises. Moving a power line is a major operation, and installing extra power lines is a major investment. The sprinkler system, with its portability and adaptability, offers many advantages for intermittent irrigation, and portable power is in most cases the key to successful use of sprinklers. As drought conditions become more critical, use of sprinkler irrigation systems will increase faster than flood or furrow systems for the simple reason that it takes less water to do the job.

LPG operators in the drought belt who are not working on irrigation power installations are passing up one of the best opportunities that they have faced in years.

*Karl Abell*







Charles J. Bucko Sr., right, points with pride to the two-way radio in the Gary, Ind., office of Pennant Gas & Fuel Inc. Mr. Bucko says the radio has been 50% responsible for growth of the firm.

## Push Out Your Fringe Area

By Joseph A. White

**T**WO bulk delivery trucks now do the work of three. Primary-customer radius extended another 20 miles. Accounts receivable cut 40%. Telephone toll calls eliminated. Driver overtime cut to zero.

Pipe dreams of a propane dealer? Not to Charles J. Bucko Sr., an expansion-minded L. P. gas operator in Gary, Ind. They're accomplished facts, and his business records can prove it.

When Mr. Bucko opened Pennant Gas & Fuel Inc. in 1947, he was told that 25 miles from home base was just about the maximum distance his delivery truck could cover efficiently. Beyond that range his vehicles would be "lost" a large part of the time; telephone tolls would outdistance profits, and costly dead miles between stops would offset the gain of a few customers.

Some men might accept the range limitation, but not Mr. Bucko. He went looking for a range expander, and found it in two-way radio.

Late in 1949 Pen-Gas went on the

air with a 60-watt FM base station and mobile units in two bulk delivery trucks. Productivity of the trucks climbed to the point where each was delivering half again as much propane as it had done before getting the radio.

Mr. Bucko's original idea was to use the radio for dispatching call-in orders not on the driver's degree-day route sheet. He soon discovered the radio was good for that job and many more, besides.

For example, the radio-equipped drivers check with the bookkeeping department whenever there is a question concerning customer accounts. Pennant's collections are much better with radio. Where long-owing customers formerly kept Mr. Bucko's accounts receivable at \$13,000 or more monthly, the instant check-up feature of two-way radio has enabled Pen-Gas drivers to slash that figure to about \$8000 now.

Trucks are no longer "lost." With the radio, office personnel in Gary now can pass along last-minute or-



This 125-ft self-supporting tower thrusts Pennant Gas' two-way radio antenna high into the air. Propane delivery trucks up to 40 miles away can communicate with headquarters.



ders to drivers as far as 40 miles away. Time spent hunting drivers by telephone from farm to farm along the route is saved.

"We find that 50% of the time our driver will pass within a block of the call-in customer's house. He drops off the order without having to double back several miles. The customer is really super-served," says Mr. Bucko.

Drivers formerly called the office every couple of hours throughout the day. As the truck fleet grew, the toll calls were costing Pennant quite a sum every week. Now that the radio is available, drivers call in each time they make a stop, and at no toll cost at all.

Occasionally, a driver will outrun

tors work their deliverymen 9 to 10 hours, six days per week for much less than the \$92 union scale Pennant pays its 40-hour-week drivers. With radio control, Pen-Gas trucks deliver as much propane between 8 a.m. and 3:30 p.m. as "isolated" trucks can unload working until 6 p.m.

Cutting costs still further are the miles saved with radio. Pennant Gas & Fuel trucks save 5 to 15 miles per day under radio-dispatch conditions, company records reveal.

After four years of radio control, Pennant's fleet has expanded to 10 trucks, all two-way radio equipped. The yearly gallonage runs comfortably into 7 figures.

Mr. Bucko states, "Two-way radio is responsible for 50% of our com-

tenna strike a low-hanging tree limb.

A few months ago the base station radio survived a disastrous fire which destroyed the original 95-ft antenna tower. One piece of Motorola test equipment was scorched so badly that the plastic knobs melted off the control panel, then it was thoroughly soaked by firemen's hoses. Digging through the wreckage afterward, Pennant employees found the instrument and set it aside to dry. When it was plugged in, it still worked!

After the fire the firm used a 60-ft utility pole as an antenna mount until the present 125-ft, self-supporting steel tower was erected. Raising the antenna increased the radio coverage by several miles.

Pennant Gas & Fuel's customers



**Pennant Gas drivers** can check in with headquarters in Gary, Ind., at the press of a button on the radio microphone. The reply comes via a loudspeaker mounted above the driver's head.



**Radio-equipped Pen-Gas truck** is as near as the customer's telephone. About one-third of the firm's business is in bottled propane, being unloaded here for an industrial customer.

the Gary base station's radio range. When that happens, a message between driver and the Gary office may be relayed by one of the trucks in between, or by stations at Pennant's branch stores at Crown Point and Hebron, Ind.

The radio played right into Pennant's plan for winning new customers with personalized service. In Mr. Bucko's view, a propane tank which has run dry rates high priority from Pen-Gas drivers. The only call that gets attention even faster is one calling for emergency repairs, such as a gas leak or defective appliance. These hazards demand—and get—rush service. Of course, such fast service wins and keeps customers.

Mr. Bucko believes the radio system saves Pennant enough in drivers' time to more than offset his competitors' lower wages and longer workweek. Many of the L. P. gas distribu-

pany's growth because it gave our trucks more range."

Although the radio plays a big part in the business, the equipment doesn't occupy much valuable office space. The base station is housed in a compact table-top console tucked under a counter next to the cashier's desk. The microphone sits on her desk beside the telephone and intercom.

Mr. Bucko can operate the station from his desk in an adjoining office by use of a telephone-type handset. All 10 mobile units and the three base stations in the system operate on a frequency of 35.94 megacycles.

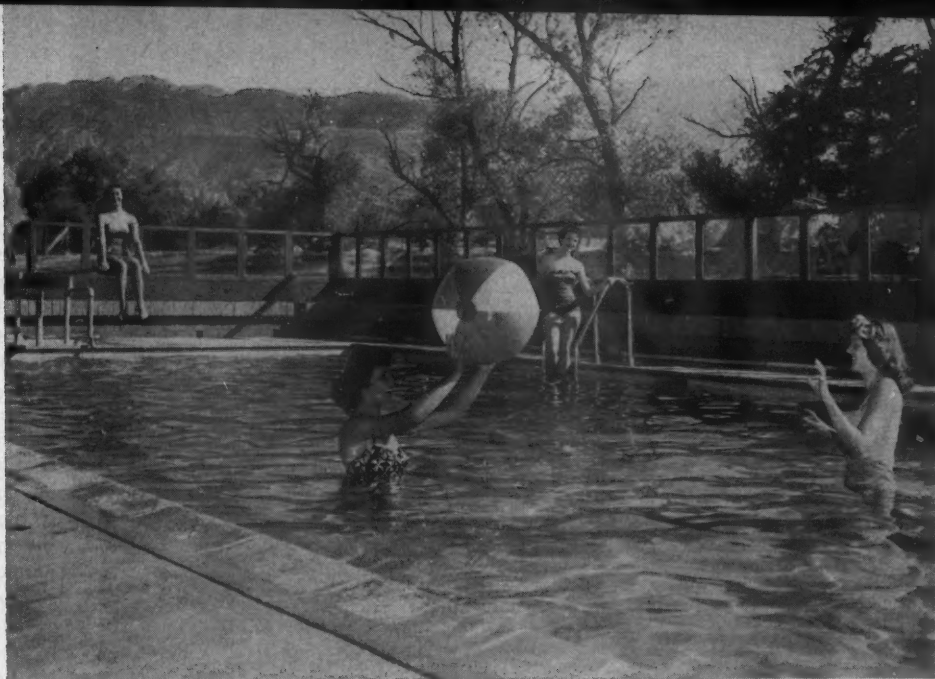
In the trucks the radio control head, loudspeaker and microphone are mounted on the instrument panel within easy reach of the drivers. The whip antenna rises from atop the truck cab. A heavy coil spring in the base absorbs the jolts should the an-

are diversified to the point that consumption stays at a comfortable level the year around. About 30% of the volume is through bottled gas sales, mainly for residential use. The remaining 70% of sales is in bulk to commercial, industrial and household users. Customers range from the city of Gary, which uses propane for heating its asphalt mixers, to schools, church-sponsored summer camps along the lake shore, highway service stations selling fuel to propane-powered trucks, and steel mills which keep L. P. gas for standby emergency use.

The radio has intangible values, too. More than once the Pen-Gas drivers have called in to report automobile accidents along the highways. Another value has been in advertising. The fast-service facility has been well received among potential customers.



Before the installation of gas heating, the Rocking K pool was practically useless, as mountain water never rose above 45° in temperature. With heating, water temperature is constantly 73° and pool is a major attraction.



## Rocking K Stretches Its Guest Season By Converting To LPG

By Bob Frank and Carl Abell

A LITTLE over a year ago the Rocking K guest ranch, four miles west of Bishop, Calif., was "all electric" and proud of it. Today everything but the kitchen runs on L. P. gas, and next year gas appliances, such as are used by 90% of the best restaurants in America, may be substituted for the present cooking equipment. All of this is happening in a territory with one of the lowest electrical rates in America; most of the current consumed on the ranch cost a little over \$.0084 per kwh.

The Rocking K guest ranch, operated by Bill and June Kinmont, has, over a period of years, built up a top-level clientele of business and professional men and their families. These people can afford to vacation where they please, and the fact that they come back to Rocking K year after year shows that they like the ranch, the facilities, the food, and the management.

Through the years the Kinmonts

have added improvements for the greater comfort and enjoyment of the guests. After all, there is competition in the dude ranch-business, and people who are used to the best at home look for the same standard of accommodations on their vacations.

A few years ago, when the guest facilities were first developed at the ranch, electricity seemed to be the best means of providing clean heat around the resort. The buildings were so scattered that steam or hot water was not practical for heating, and oil has never been even close to ideal for cooking or water heating.

It was necessary, of course, to maintain comfortable temperatures in the main building, which houses the lobby, recreation room, dining room and kitchen. Even in early summer the evenings at this mile-high altitude are chilly, making it necessary to provide moderate heat. The big wood-burning fireplaces helped, but they were not adequate early and late in the season, so the ranch had to

depend on auxiliary electric heaters to make up the deficit. These heaters were expensive.

The ranch is located in the heart of the fishing and hunting country, and the Kinmonts were trying to stretch their operating season through more months of the year, taking in the early season fishermen and providing accommodations for the deer hunters whose open season begins late in September. They also looked with favor on winter operation, to take advantage of the skiing season. Electric heat during the coldest months proved to be a serious handicap.

Most summer guests like to swim, and those who do not swim like to look at swimmers. The Kinmonts decided that a swimming pool would be a valuable attraction, so they built a pool and sun deck. The pool is not large—21 by 44 ft—but with the help of one of the leading specialists in swimming pool design it was made very attractive.

The Kinmonts soon discovered a major drawback. The available water



Aerial view of Rocking K guest ranch four miles west of Bishop, Calif.

coming down from the snowbanks on the mountains that tower above the valley was very cold, reaching a high of about 45° in midsummer. Even though nearly all the days are sunny and the midday temperature generally goes above 80° during the vacation months, the sun's heat did not bring the pool up to comfortable swimming temperature even during the hottest months, and the rest of the year it was practically useless. Without extra heat for the water the pool was a bad investment. And this job was not cut out for electricity. Heating a swimming pool is not a job for a slow-recovery unit like an electric water heater.

The Kinmonts put the problem to Sid Harding, representative of the General Water Heater Co., and Herb Frambes, manager of the Mountain Liquid Gas Co. After a careful study they determined that the heating problem could be solved so the use of the pool could be extended to approximately nine months instead of being limited to a five month period, and even then used only by the hardier guests. The heating system was installed early in 1954, and many guests enjoyed swimming in March and April, with water temperature held constantly at 73° while the at-

mospheric temperature was down in the thirties.

The heating system consists of a General Hi-Rate L. P. gas water heater of 100-gal. storage capacity, with two auxiliary pressure tanks for extra storage and treatment of the water. Temperature is maintained constantly at 73° by means of a Mercoid control, model DA35, which will hold any temperature desired between 25° and 100°.

The fuel supply for the pool is a 250 gal. propane tank, which is filled by Mountain Liquid Gas Co. The highest month's fuel bill for the pool was between \$80 and \$90 at the beginning of the season. During the summer months it dropped to an insignificant figure, but it will rise again as the weather cools in the fall. Mr. Kinmont plans to keep the pool in operation through the deer season in the fall.

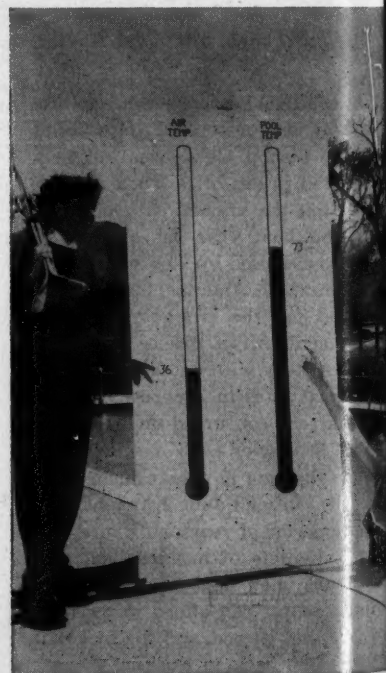
The results in heating the pool were so satisfactory that Herb Frambes had no difficulty in persuading the Kinmonts to install gas heaters for comfort and hot water in some new cabins that were built for the 1954 summer season. The results in these applications were so far superior to electricity that it was decided to install LPG heat and hot

water in all of the cabins, and to change from electric heat to gas in the main lodge and dining room. There are now two 150-gal. tanks for this purpose, one for the lodge and one for the cabins.

The kitchen staff wanted gas for cooking as well, but it was decided to defer this change until after the close of the operating season so none of the guests would be inconvenienced by missing meals.

The buildings at the Rocking K Ranch are ideally constructed for heating efficiency. Walls are made of pumice brick, which has exceptionally high insulating value because of the millions of tiny air cells in the pumice aggregate, which is held together with the minimum of Portland cement. The bricks are light in weight, large, and are provided with air holes which line up vertically when laid in lapped courses. This construction also provides ready-made channels through which the appliances may be vented. The bricks are soft and easily cut or drilled, so the expense of installing the gas appliances was held to a low figure—nothing to compare with the cost of running 220 volt circuits.

Dearborn vented circulating heat-



The air may be cold but the water in the pool is warm. Jill Kinmont, left, daughter of the owners of Rocking K, and Sue Wissing of Bishop demonstrate this fact at the edge of the heated pool.



ers were used for the guest cottages, and combination radiant and circulating heaters of the same make for the dining room. A central heating plant also operating on L. P. gas now brings full-time comfort to the main building.

With adequate heating for any weather the Rocking K ranch is now equipped for year-round comfort of guests. Year-round business is important to the Kinmonds, as a longer season is important to resort operators everywhere.

Bishop is known as "the town that trout built." The surrounding area is sparsely populated, with only about 15,000 permanent residents in Inyo and Mono counties—two of the largest in the United States. But during the trout season they play host to a fishing population close to 100,000. That affects not only the resorts but every other line of business. A great deal of the summer profits go to pay the winter expenses. The L. P. gas business operates on a heavy inverse ratio.

To level out this business curve the local people are working hard to develop winter sports which begin shortly after the close of the deer season in November. There are several good ski slopes near the Rocking K ranch, but by far the most popular is Mammoth mountain, about 45 miles north of Bishop. Here excellent skiing is enjoyed from October through June each year. Mammoth enjoys the longest season of any slope in the United States, and its popularity is increasing every year. With the development of enough good resorts this area may become as well known and popular as Sun Valley in Idaho.

Herb Frambes is more than pleased with the outcome of his venture in heating the swimming pool of the Rocking K ranch. It has become a good deal more than just a seasonal load heating one swimming pool. It led to the installation of gas for heating the guest quarters of the ranch, and by making year-round comfort possible it made the ranch a year-round gas customer.

These developments also pointed out a successful technique in selling against electrical competition—go in with gas where electricity is most vulnerable, and develop the accounts step by step from an easy start.

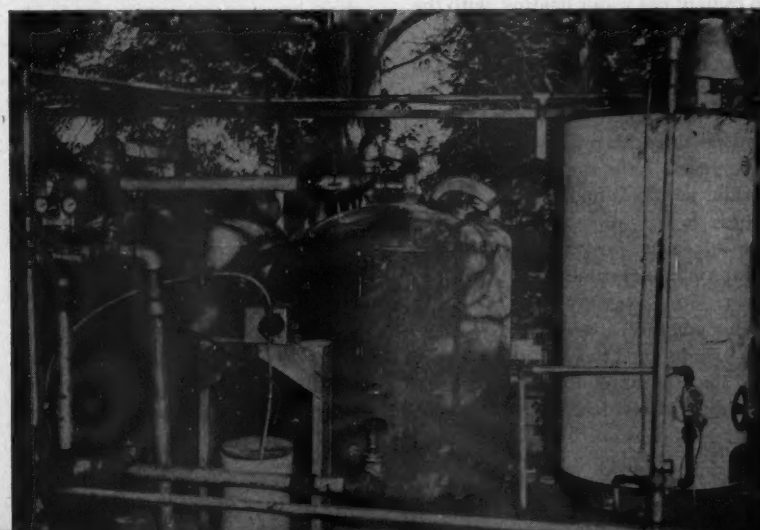


**Mountain Liquid Gas Co.** in Bishop services the heating equipment at Rocking K ranch. Herb Frambes, company owner, was active in planning the heating units and their installation.



**Above:** Dining room at Rocking K is heated with L. P. gas. A little over a year ago the ranch was "all electric."

**Below:** Manifold set-up, valves and water heater used in heating water for the swimming pool at Rocking K guest ranch near Bishop, Calif.



Electricity is available at an attractive price in the Northwest. Loss of floor furnace, circulator and wall heater customers to his competition became quite a problem for J. V. Hamar of Gas Heat Inc. He found the solution in hot water, radiant baseboard heating.

## Radiant Baseboard Heating Beats the Competition For This Portland Dealer

By Benedict Kruss



Home of Gas Heat Inc. in Portland, Ore. J. V. Hamar has found the answer to house heating in the Northwest with hot water, radiant baseboard heating.

To make any money on household heating today, the L. P. gas dealer has to learn to sell the markets where the money is being spent, according to J. V. Hamar, vice president and general manager of Gas Heat Inc., in Portland, Ore.

Mr. Hamar believes the answer to the L. P. gas dealer's need for continuing heating installation sales lies in radiant hot water heating, with the accent on the baseboard method.

Residential heating installations in Gas Heat's territory—Oregon, southern Washington and western Idaho—had declined alarmingly in the past few years. As a matter of fact Mr. Hamar admits it had reached a point where it was almost nil. In looking for a reason for this decline, Gas Heat's manager came up with this answer.

Immediately after World War II, the firm jumped heavily into the sale and installation of the time honored methods of residential heating with

L. P. gas—floor furnaces, circulators and wall heaters. These units are easy to install and are still adequate in some conditions. But they have passed out of the picture almost completely as a means of heating new homes in the area which Gas Heat serves.

Tremendous advances have been made in residential heating in recent years and neither buyers nor contractors will settle today for anything less than a central system which heats the entire house adequately. Space heating installations are especially vulnerable in the Northwest, where government power projects make electricity available at a price attractive for household heating. More and more of Gas Heat's space heating installations are being picked off by electric competition.

In looking for his answer to a method of LPG heating which would serve today's residential market best, Mr. Hamar experimented first with forced air. In the Northwest, this would not work for two reasons:

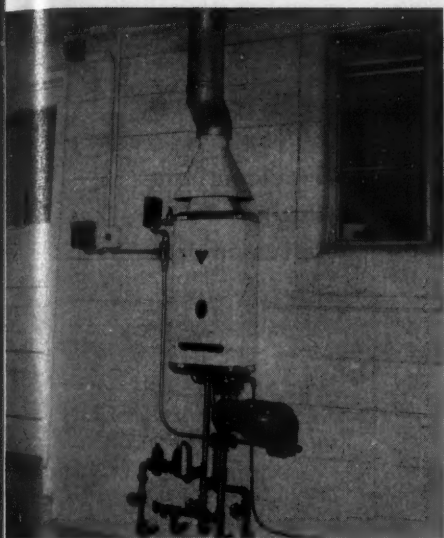
(1) Oil brought up the coast in barges has a competitive edge of almost five cents a gallon over butane and propane. This type of installa-

tion can be fired just as easily with oil as with gas, and the advantages of the latter are too often not enough to overcome the price obstacle in the mind of the customer.

(2) The installation of forced air systems is too complex to be handled by the average LPG dealer. As Mr. Hamar puts it: "We sell the jobs and the tinsmiths come in and have all the fun."

Mr. Hamar found that the sheet metal work connected with forced air heat was not a practical undertaking for his firm. Tinsmiths, he points out, must go into other fields to keep their shops going, such as installing rain gutters and downspouts. This is too far afield. Yet, going out and contracting for the metalwork puts the L. P. gas dealer at a price disadvantage. This is especially true because most sheet metal houses are dealers for one or more lines of forced air furnaces.

With hot water, radiant baseboard heating, Mr. Hamar found, the LPG dealer has a different story to tell. Although it may look complicated on the surface, the dealer can learn to handle complete installations within his own organization in a fairly short



The only heating plant necessary for a radiant baseboard installation is this compact unit, which will supply a five room house.



Portions of a typical hot water radiant heat installation in a home under construction in Oswego, Ore., a Portland suburb. Baseboard fixtures will be painted to blend with the room.

time. And the equipment is modern.

Pricewise, Gas Heat can deliver more per dollar with this method than any competition, with the one exception, of course, of natural gas. A residence can be equipped for full, central heat for between \$850 and \$1150, depending on size. An oil installation attempting to use the same baseboard heating principle would require a large furnace in place of a small gas heater. This would run the cost of an installation of baseboard heating with oil to almost double that of L. P. gas. Installation of L. P. gas hot water baseboard heat is less expensive than any forced air system of comparable capacity.

Radiant heat can be sold on the basis of cleanliness. With no blowing, there is no scattering of dust.

It can also be sold on the basis of providing a more even method of household heating. There is no concentrated focal point from which heat emanates. Heat is spread through most of the perimeter of the room, providing even temperatures throughout and eliminating cold outside walls. In the damp, rainy Northwest, this is a special advantage. It is common here to find condensation on and around windows. Baseboard heating installations are always run under windows. Rising warm air completely eliminates this problem.

L. P. gas operates so much more efficiently than oil in this type of installation that it wipes out the price

differential between the fuels in this area. This is because the properties of gas heat are such that copper can be used in the water heating unit while oil furnaces must be made of cast iron or steel. Copper, of course, is a better conductor of heat.

To illustrate this, Mr. Hamar can point to installations of L. P. gas hot water heat which have gone through more than a year without burning the original paint off the vents. Contrasted to this, the vents of oil furnaces will go up to 400°. Because of the increased heat conducting efficiency, copper units are about half the size of equivalent iron furnaces.

Gas Heat has proved this type of installation to its complete satisfaction in Portland and is in the process of training the personnel at its 25 branches for sales and service. To introduce employees to this new type of heating installation, Gas Heat has worked out a program of six lessons. Each of these takes up a full evening once a week.

For branches close enough to Portland, training sessions are being held in the main office. Key personnel at the central office are travelling to outlying branches to conduct the meetings.

It has been found best to separate each training group into two sections: those who have some knowledge of the heating method, and those who have no knowledge whatsoever. In this way, the staff avoids

wasting the time of those who already have the fundamentals.

Aided by representatives of heating unit and supply manufacturers, the series of classes covers the planning and installation of a heating plant.

Mr. Hamar and his assistants realize that they are not putting fully trained crews into the field as a result of these six lessons. The idea is to give branch personnel a basic understanding of what baseboard heating will do, what it costs and how it should be sold. On the first installation sold at each branch office, the plan is to send a man from Portland to supervise the installation. On the second sale, a man will still be sent to the scene if necessary. But, by the time of the third sale, local staffs should be able to manage alone.

Mr. Hamar stresses the fact that it is fairly inexpensive for a dealer to establish himself to handle installations of hot water baseboard, or even wall and floor radiant heat. Almost all required baseboard heating materials come in prefabricated sections with fittings to match.

"About the only extra tools we have needed," Mr. Hamar says, "have been some thread dies and pipe wrenches.

"The beautiful part of an installation like this," he adds, "is that it is built with and becomes an integral part of a house. This is the type of installation we need."



# How Does the Current Tax Bill Affect You?

By J. C. Dockeray  
Tax Consultant  
Department of Commerce  
Washington, D. C.

**I**N THE broadest sense there is only one tax problem, namely, that taxes are painfully high. Not a great deal can be done about total burden, but current developments offer real promise of relief to the businessman.

We used to say that tax burdens were caused by programs asked for by the voter and, therefore, controllable by the voter whenever he chose to accept a reduced scale of government activity in order to get lower taxes.

Today, an examination of the budget for 1954-55 fiscal year shows that of each dollar of Federal expenditure, 68 cents will go for military, military aid, atomic energy, and stockpiling activities; 22 cents will go for charges which are fixed by law such as interest on the public debt, veterans' benefits, and grants to the states for highway and similar programs; while only 10 cents will go for the activities usually associated with government such as the maintenance of the executive departments, the Federal courts, special security, and agricultural programs.

This average dollar is paid for by receipts from taxes and by additions to the public debt. It is expected that 43 cents will come from individual income taxes; 31 cents from corporate income taxes; 16 cents from excise taxes; 6 cents from customs and miscellaneous taxes; and 4 cents from borrowing. In a sense, the deficit equals half of what we regard as the ordinary and controllable expenses of the government. Abolishing half of the ordinary government activities would not cut taxes, it would only

eliminate the deficit. This does not mean that nothing can be done because actually something is being done for the taxpayer at the present time.

These efforts take concrete form in the new tax revision bill. This bill is the first comprehensive tax revision measure in over half a century. The previously existing complex of separate enactments has been recodified into a single document which will be easier to interpret and to understand. Many technical revisions are involved which are of interest chiefly to the tax practitioner. But there are others which will be of real benefit to the business community. Some of the changes merely take the form of making the tax consequences of a business decision more predictable. Other changes actually reduce the load on business activity.

The basic objective of the tax bill is to achieve a greater degree of equity as between taxpayers, both individual and corporate. It is contended that the past decades have produced inequities as a result of piecemeal legislation and the necessary scramble for the maximum tax revenue possible. Consequently, the bill grants relief both to individuals and to business enterprises.

In the area of tax changes for the benefit of business enterprise there are three features worthy of our discussion. One relates to depreciation for tax purposes, the second to Section 102, and the third to the problem of double taxation.

Depreciation for tax purposes has long been a bone of contention between the taxpayers and the internal revenue service. The present internal revenue code merely provides that among the deductions which may be taken from business income may

## A Symposium of Tax Problems and Current Tax Developments

*Following is a synopsis of a speech delivered before the Illinois Gas Managers' Conference in March, 1954. In view of the current action on the tax measure, we feel that this article, including recent changes recommended by Mr. Dockeray, is most pertinent. The excerpts appearing on pages 45-46 are from a current analysis of the tax measure appearing in the Wall Street Journal.*

be a reasonable allowance for depreciation including obsolescence. In the years prior to 1934, it was the government's policy to let business management take pretty much any amount it chose as long as it was not definitely excessive. In other words, "reasonable" is an elastic term which in this case the government chose to interpret liberally.

The current tax bill legislates standards for proper depreciation practices rather than providing only a "reasonable" allowance rule. The bill provides that on new equipment acquired after Dec. 31 of last year, the taxpayer may compute depreciation on either (1) a straight line basis, (2) a declining balance basis using a rate not more than twice the rate permitted on a straight line basis or, (3) any other method not resulting in a faster accumulation of reserves than would be characteristic of the declining balance method. The exception to this is the "sum of the digits" method, which permits accumulating depreciation reserves a little more rapidly than the declining balance method and has the further advantage of permitting complete recovery of the investment within the estimated length of life.

Also the law provides that the internal revenue service may not change estimates of length of life as determined by the taxpayer unless that determination differs by more than 10% from the length of life determined by the bureau.

In addition, agreements on rates may be made between the revenue service and the taxpayer and these rates may not be changed. If a proposal is made to change these rates, the burden of proof is to be on the party making the proposal.

What does this mean to the business taxpayer? It does not give him

will make it much easier to keep up with progress in your industry.

If there has been any bogey for the small corporation, it has been the well known and widely misunderstood Section 102. This section provides that if the corporation is used as a device for avoiding personal income taxes by not distributing corporate earnings, special surtaxes shall be levied at 27½ or 38½% of the retentions. In practice this has come to mean that if a business retained its earnings to finance an expanded business activity, it was not regarded as being unreasonable retention of

ditional funds in their businesses have actually paid them out because of fear of this section.

The new revision attempts to avoid these things. In the first place, \$60,000 is exempt from the tax and beyond debate as being reasonable or unreasonable.

Second, the burden of proof as to the reasonableness of the retention is placed upon the government rather than upon the taxpayer.

Third, what is unreasonably retained is that amount which is beyond "reasonably anticipated" needs. In other words, if the retention is con-

## Partnerships

Certain partnerships may, for the first time, elect to be taxed as corporations. Under the measure, any partnership that meets certain qualifications may elect within 60 days after the close of any taxable year to be taxed as a corporation. The partnership cannot have more than 50 individual partners. . . . Once a partnership elects to be taxed as a corporation, it cannot change that decision unless ownership in the partnership changes 20% or more.

the complete freedom of choice which many believe to be sound. But it does permit a more rapid recovery of his investment in depreciable assets and thus makes any investment less risky and easier to finance.

A building which today might be depreciated at a rate of 3% per year would be depreciable at 6% of the remaining value of the asset. Storage tanks which may carry a 5% rate will carry a 10% rate. Machinery with a 10% rate will become 20%, and trucks which now are depreciable at 20 to 25% per annum will be depreciable at 40 or 50% the first year with the same percentage applying to the remaining value of the next year. In other words, a truck with a four year life will be three-quarters depreciated in two years. This will be of material benefit to the business enterprise and

## Bad Debts

The measure changes the definition of a business bad debt. A business bad debt is fully deductible against ordinary income, but a non-business bad debt is considered a capital loss, deductible only against capital gains and a limited amount of ordinary income. The old rule has been that a debt which becomes bad after a taxpayer goes out of business is not considered a business bad debt, even though it was acquired as part of the taxpayer's business. The measure makes a business bad debt out of any bad debt that was acquired in connection with a trade or business, even though the taxpayer may no longer be in business when the debt becomes bad.

earnings. On the other hand, if the retained earnings were evidenced by excessive cash accounts, or by loans to officers and directors, or sometimes by financing of investments in other lines of activity, then it might be held to be an improper retention.

The internal revenue regulations set forth a number of criteria which agents were to use in identifying returns for examination on this point. One criterion specified that returns not showing dividends in excess of 70% of earnings were to be examined. Many businesses came to believe that unless they distributed a high proportion of their earnings they would be subject to the tax. Actually, the tax has been administered in a most restricted manner. However, it is impossible to tell how many corporations which could have used ad-

## Depreciation

The (tax) measure will permit taxpayers to use the so-called declining balance method. Under this method, twice the percentage allowed under the straight line method will be deducted each year, but the percentage will be applied to the unamortized balance rather than to the original cost. This results in a taxpayer writing off about two-thirds of the cost of an asset in half its life, rather than half the cost in that period as under the old law.

sistent with plans at the time of the retention, it is not subject to the tax.

Fourth, on the matter of ownership of other businesses, it is stated that if the taxpayer corporation retains earnings to invest in another business which is actually operated by that taxpayer, this too will be exempt from the tax.

The third point of concern to business is that relating to the double taxation of corporate income. Under the present rate structure each dollar of corporate income pays a 30% normal tax and if over \$25,000 pays a 22% surtax. This means that most of the dollars of corporate income pay a 52 cent tax leaving 48 cents for use in the business or for distribution to the stockholders.

Let us presume as is typical of most businesses, that half of the remain-

der, or 25 cents, is distributed in dividends. This will be subject to a tax of from 5 to 22 cents depending on the tax brackets of the receiving stockholder. In total, this amounts to 57 to 80 cents tax on the original dollar of business income in the hands of the corporation.

To the stockholder this looks like a "heads you win, tails I lose" proposition. To the individual small businessman it looks like another reason not to incorporate. Certainly, it is a contributing factor in a situation wherein business corporations com-

business runs something like this: An energetic man with an idea decides he would like to be his own boss. He is usually long on sales ability or production know-how, but short of cash and financial knowledge. He borrows what he can from friends, establishes a line of credit with suppliers, and begins. With a little luck and lots of hard work and long hours, he gradually builds up his financial resources.

As he grows in experience and in assets, he will be able to borrow from banks for working purposes. But he

the size to which most businesses can expect to grow out of earnings. This means you must look to other sources for equity money.

The high-level prosperity which we have enjoyed during the past few years has brought with it new patterns of savings and investment. Savings are at new high levels and more people have money which could be invested in business enterprises. These people only need to be sold on the idea.

It may be that our small operator should follow the policy of tapping

## Salesmen

"Outside" salesmen—employees who solicit business full-time away from the employer's place of business—will be permitted to deduct entertainment and all other business expenses in arriving at adjusted gross income, just as self-employed salesmen now can do. At present, these "outside" salesmen can deduct these expenses only if they are reimbursed, are away from home or use the full itemized deduction.

## Loss Carryback

The old rule has been that net operating losses that cannot be used in the current year for tax purposes can be carried back one year or forward five years to offset earnings and thus cut taxes in those years. The measure will keep the five-year carry-forward but provides a two-year carry-back.

Another change will permit individuals who sell part or all of their business assets to include any loss on that sale in their net operating loss carry-over for that year. Corporations have been able to do this but individuals in business have not.

## Theft

Losses arising from theft or embezzlement will be deducted in the year in which they were discovered. Previously, the losses have had to be deducted for the year in which they occurred, and frequently the loss would not be discovered until it was too late to go back and get a refund for that year.

prise only about 15% of all business units and only about 8% of the small businesses.

The current tax bill grants each taxpayer an exemption for the first \$50 of dividends received plus a 4% credit of dividends received against income taxes as otherwise calculated. Married stockholders filing a joint return may have the same credit for both husband and wife.

I would like to turn now to another problem—one that is not a tax problem itself—but one that exists in large measure because of high taxes. This is the financial problem. If there is any problem concerning which small businessmen are in general agreement, it is the chronic shortage in capital. This is particularly true of equity capital.

The usual life history of a small

is likely to find that lack of equity capital is continually limiting his growth. In the true meaning of the term, equity capital comes from only one source—savings. Only as our small operator is able to save from his net earnings can he add to his equity capital.

This is where taxes come in. Taxes, ranging upwards from 20% on individuals and 30% on corporations, must be paid before any savings can be made. High taxes restrict this ability to grow.

Moreover, this restriction becomes really serious at the point where the business should move from the truly small one-man stage to a larger and more substantial size. It is evident that the speed with which we accumulate capital from savings is slowed down. A ceiling has been placed on

this source of funds. Perhaps he should analyze his market area to determine the opportunity for growth and the probable return from such growth. Then he can incorporate his business and sell stock to his friends, customers, or any other potential investor. He need not lose control of the business, and while he must share the net profits, he can also draw a larger salary as the manager of a larger business. With the reduction in double taxation of dividends, corporate stocks will become more profitable investments and hence easier to sell.

This approach may not appeal to many of you, but it is the way to expand more rapidly in our economic environment. And it is one way to adapt the new tax devices to your advantage.



# Propane Fires the Plumber's Torch

... and saves time and money  
for this Arizona firm.

By Dean Smith

**H**ARLAN FIKE, proprietor of Fike Plumbing Co., Phoenix, started using butane in his blow torches 10 years ago. He estimates that his changeover from white gasoline to butane, and more recently propane, has saved him one man-hour per employee per day.

Since Mr. Fike employs six men, the savings in time and money are such that he is as enthusiastic a booster for butane and propane as one will find anywhere.

Saving in lead is one of the factors which makes propane a highly superior product for plumbers, says Mr. Fike. Two of the most used devices in plumbing operations are the torch and furnace, and butane or propane may be used in both. When gasoline is used in the furnace, the flame under the lead pot must be at its peak at all times. If the plumber finds it necessary to interrupt operations for even a short time, he must keep the lead boiling when gasoline is used and much of the lead is boiled away. With butane or propane, the flame can be turned down low to keep the lead hot without evaporating.

The propane torch consists primarily of a nozzle on the end of a hose, which is connected to the propane bottle. Its flame is controlled by the valve on the bottle and it can be as large or as small a flame as the job requires. Gasoline torches must be operated at full blast. The facile nature of the propane torch allows the worker to turn it at any angle, up, or down without endangering either himself or the walls or equipment with which he is working.

Mr. Fike estimates that it requires 20 to 40 minutes to make a gasoline blow torch operate. Moving parts must be cleaned, gasoline poured,

lighted and allowed to heat the torch nozzle. Then the gasoline is pumped up to the nozzle and fired. If it does not light, the operator must start the procedure again.

The propane torch lights in an instant and is hot enough for use within seconds. A spark is produced at the torch head by a striker, a hand sized object with a knurled roller that crosses a piece of flint and produces a spark.

When gasoline blow torches are used, the tank must be filled each day and some spillage is probable. These torches become dangerous, too, when parts wear and allow leakage. And finally, storage of gasoline in a shop is dangerous in any business.

The propane torch eliminates all these problems. The only danger in using it is in excessive gas pressures, and this problem is eliminated by the use of a safety valve. A further safety factor is provided by the use of a

hose 15 ft or more in length, which places the operator far enough from the propane bottle to avoid any effect of flame heat on the cylinder.

Mr. Fike says the heat provided by the propane torch is such that it can be used on sewer pipes, water pipes, copper, steel or almost any metal. Its uses are almost unlimited.

The torch head used with propane has no moving parts and does not wear out. Gasoline torches normally show excessive wear in four months. In addition, the propane flame does not fade when the fuel in the tank runs low, as it does with gasoline.

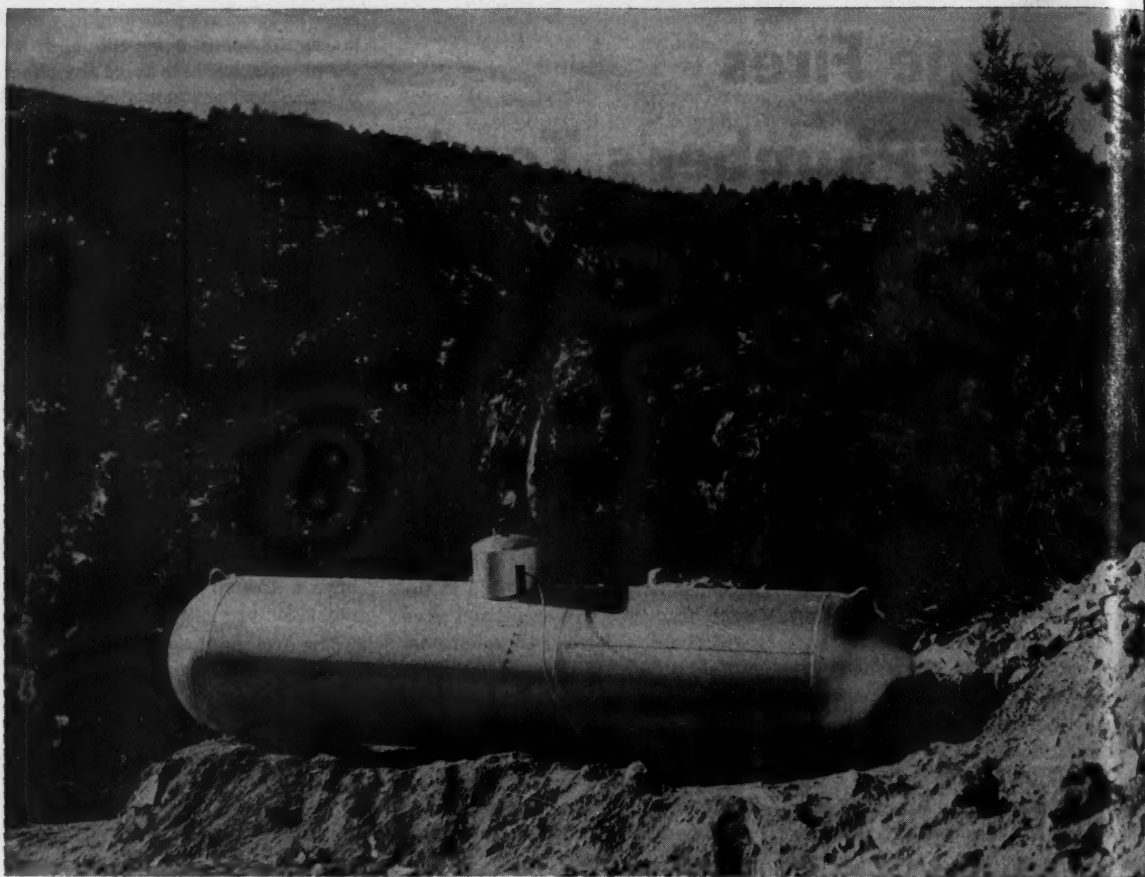
Mr. Fike uses 75 to 100 lb of propane per month in normal operations, and when he is working on a housing development—one of his specialties—the amount is higher. He usually buys a 1500-lb tank and fills 5-gal. tanks for use as needed.

The firm purchases most of its propane supply from Fannin's Bu-Gas in Phoenix.

Many other Phoenix area plumbers now are using butane and propane for their torches and furnaces, but many others are still operating with gasoline blow torches. Mr. Fike believes that all will make the changeover as soon as they become acquainted with the many advantages butane and propane have to offer.

**Phoenix plumber** prepares to use propane torch (left) and plumber's furnace (right). A bucket for heating lead is on top of the furnace.





Some 9000 ft above sea level, this 1000-gal. tank supplies L. P. gas to the Good Friday tungsten mill.

## Tungsten Means "Plus" Business For Arapahoe Gas

By J. Arthur Thompson



WILLIAM Shakespeare remarked that "All that glitters is not gold" and by the same token, he might have said that gold doesn't always glitter. Sometimes some very unpretentious black sand may pay off as well as gold and be easier to get. \*

Boulder county in Colorado is a prosperous county and has long been noted for its wealth, mineral and otherwise. Bob Hamm and John Taussig of the Arapahoe Gas Co. at Boulder, Colo., struck pay dirt in the tungsten mills, without ever seeing a golden nugget.

Wulftung mill's "Charlie," his sap no longer frozen, declares that L. P. gas has made him a new man.

The Arapahoe Gas Co., distributor of Shamrock L. P. gas, has an efficient and profitable operation in serving rural and suburban homes. In addition they have picked up some nice "plus" business in tungsten.

Tungsten is a very heavy element, much in demand for hardening steel, particularly in the defense industries. It has been mined for many years in Boulder county and the recent developments in our national defense armament program have increased the demand and set the price at a profitable level.

Arapahoe Gas has a number of good customers among the tungsten mills tucked away in the surround-

ing mountains — Boulder Tungsten Co., Good Friday mine and mill, the Wulfung mill and others.

At the Good Friday mine, the mill is down in a canyon and is accessible either through the shaft and tunnel of the mine itself or by a very uncertain pack trail. Not an easy place to get into at any time, let alone in winter.

The mill must be kept heated or the concentrating tables will freeze at night and half of the next day will be wasted thawing things out again. Before Arapahoe Gas moved into the picture, one man had to be on duty all night just to keep the wood fires going. Coal couldn't be brought in. Now the entire fuel bill for the mill is less than the wages of the fireman.

The tank that supplies this installation is at an elevation of around 9000 ft above sea level and is located near the road that leads to the mine shaft and buildings. The mill building is only 850 ft away from the tank, but 650 ft of that is a vertical drop.

The tank, a standard Eaton 1000-gal. domestic, has a Rego 2403U regulator with 15-lb pressure on the outlet side. The line, an 850-ft half inch black pipe, leads into a 119-gal. tank equipped with a Woodward-Martin vaporizer with check valve on the inlet side of the tank.

The regulator on the outlet side of this second tank is a Rego 2403S with a 2-lb pressure on the outlet side, and feeds through an insulated line into the mill. The mill building is 20 ft wide and 120 ft long; floor and ceiling are parallel and the whole clings to the mountain side at a 45° angle.

At the bottom of this building is one Reznor heater of 200,000 Btu capacity, which heats the entire building very satisfactorily. In addition to the heater, roasters and dryers of concentrate are fired by L. P. gas. Concentrate dryers have Killam burners set at 2 million Btu per hour.

All equipment installed by Arapahoe Gas Co. has 100% safety shut-offs. This applies even to Bunsen burners in the laboratories.

At the Boulder Tungsten Co. mill, operated by William Gillette, a pair of 1000-gal. tanks are used to supply the fuel for the ore roaster and concentrate dryers as well as the plant heating. Here too a remarkable saving and efficiency.

At the little mountain town of Nederland, Colo., the famous Wulfung mill is owned and operated by Hetzger Mines Inc. Elmer Hetzger is the president. The large ore roaster is fired by L. P. gas, as are the several concentrate dryers. Killam burners in the latter are set at 1 million Btu.

While walking through the Wulfung mill, if you happen to look up at a certain big drive wheel, you are startled to note a man turning the wheel and apparently driving the machinery of the whole plant. Mr. Hetzger will inform you that this is

"Charlie," and while "Charlie" is made of wood, he is the steadiest worker in the whole plant!

"How do you like this L. P. gas, Charlie?"

"Sure 'tis the finest thing Elmer Hetzger ever done!" Charlie answered, never missing a turn on his wheel. "Before he put it in my sap was froze up all the time. Now I feel like a new man! My eye sight has improved, my rheumatiz has quit hurtin', my digestion is better and my bunions have gone down! L. P. gas is the most wonderful thing the world."



Bob Hamm (left) of Arapahoe Gas Co. and Elmer Hetzger (right), president of Hetzger Mines Inc., discuss the operation of the concentrate dryers as they handle samples of the black tungsten concentrate.



Wulfung's big ore roaster is fired with liquefied petroleum gas.



# Hot Water for Rent!

Does your business need a healthy shot in the arm? Examine the water heater rental plan. It's working for the gas utilities. Why not for LPG?



*JUST A DROP  
in the Bucket.*

Is What It Costs YOU To

## RENT

An Automatic GAS Storage  
Water Heater

Yes, Only **\$2.00**  
Per Month



With Each Drop . . .  
A Bucket of Hot Water  
Is Yours!

Just a drop in the bucket when you have hours of complete satisfaction every day of the year with hot water SALON! Your RENTED water heater costs you only a few pennies a day. The Gas Company makes the plumbing arrangements and delivers the heater. If you are dissatisfied or move away, the water heater will be removed and the rental agreement will be terminated. What easier way is there to have AUTOMATIC HOT WATER than to RENT a Water Heater from the GAS Company? Call today! Haverhill 6-8371.

See the Store loan GAS Cooking Stoves, Toasters, 9 a.m., WRE-TV, Channel 6

Offices In:

HAVERHILL - AMESBURY - NEWBURYPORT - IPSWICH

**HAVERHILL Gas COMPANY**  
THE MODERN FUEL FOR HOME & INDUSTRY

Do YOU sometimes find that, for every convincing sales argument you advance, your prospective water heater buyer counters with an even more valid reason why he can't buy at this time?

Perhaps you have succeeded in persuading him that an efficient new automatic gas heater is in every way more satisfactory than his time-tested teakettle on the old kitchen range. But after a short huddle with his wife: "No, \$140 is too much money to put out at this time."

Then you suggest a pay-as-you-go plan designed to tempt any but the most wary buyer, but this still bites too deeply into his monthly budget. And besides, the family has considered moving out to the coast, and doesn't want to further complicate the possible moving problem.

Discouraging, isn't it? But how would you like a trump card to cover even the best of your prospect's leads?

After all, you're primarily interested in getting him used to the idea of modern living with L. P. gas, and the water heater is the logical key to the ALL-GAS home (see May, BPN, page 35). It's generally recognized superiority over the electric water heater, economically and service-wise, makes it the industry's most potent weapon in the battle for the domestic load. From the standpoint of dealers' income, experience shows that its installation is often followed by sales of automatic dishwasher, washing machine, and clothes dryer, and in many cases it consumes nearly three times as much gas as the kitchen range.

So why not consider renting water heaters the same way many dealers

rent gas storage tanks to customers? The utility gas industry is finding that the plan, by increasing line loads and stimulating appliance sales in normally sluggish territories, is a real bonanza.

To cite a few examples: the Haverhill Gas Light Co. of Massachusetts initiated a rental plan in June, 1953, the aftermath of which has been most gratifying. Charging a flat rental of \$2 per month, the company installed 362 heaters under the plan during the first six months. It was anticipated that as a result of the rental program sales of new heaters might drop off appreciably, but the results pleasantly surprised even the most optimistic proponents of the plan.

From January to June, 1953 heater sales had amounted to 240 units. This was an average of 48 per month. For the ensuing six months, following Haverhill's embarkation of its rental venture, the sales tally came to 305, or an average of about 50 units per month. The year's sales figure of 545, as contrasted to 415 for the preceding year, allayed any fears that the new program might have an adverse effect on merchandise profit. The plan, with its very effective sales promotion, brought in many customers intending to rent but who actually stayed to buy automatic water heaters.

In the words of Frank J. McLaughlin, Haverhill's sales manager: "... Our rental program was designed to crack a market heretofore unapproachable. We have achieved that end. We have rented water heaters to many homes that had no hot water facilities. We have rented heaters to tenants who had side arm heaters, to persons who owned their homes and who had a furnace coil, augmented

in the summer months by a side arm heater, and we have rented heaters to replace tankless heaters. . . .

"We believe that our rental plan has not only developed the tenement market but has also opened other fields where a sales effort would be ineffective."

Haverhill was the pioneer in the area, but the idea is rapidly catching on with other utilities throughout the north and northeast. Equally pleased with the results of their recent heater rental programs are the Lake Shore Gas Co. of Ashtabula, Ohio, and the Blackstone Valley Gas & Electric Co. of Pawtucket, R. I.

The Lake Shore plan is actually only one phase of a revitalized merchandising program that is fast pulling the small company out of a flat-on-its-back situation. But the impact of this single activity is shown by the immediate acceptance of the public; within the first two weeks after the plan was announced, more than 300 units had been placed. For a utility serving some 11,700 residential meters the added gas load was a respectable one, and at last reports, it was continuing to grow.

As was the case with Haverhill, sales have been boosted rather than retarded since the inception of the program. To meet varying capacity requirements two models have been made available. The 30-gal. size rents for \$1.75 per month and the 40-gal. one for \$2. The fee is added to the monthly gas bill and the customer has the usual number of bills to pay at the end of the month.

Reports received from Blackstone have been similarly optimistic. For this company the program was a quick shot-in-the-arm. Through May 1, sales of water heaters were lagging far behind 1953's record. A mere 217 has been delivered during the five-month period, compared with last year's January-to-June score of 526. It was obvious that in June the company would have to place more than 300 units to bring load growth into line with 1953.

The program did it. For the six-week period from May 1, when the program began, through June 12, a total of 644 rental gas water heaters had been placed. Sales, too, perked up, totaling 194 in the same period, only slightly less than the entire five-month total; and adding in 31 sales

of electric models to the May-June period, total sales were ahead of the previous five months.

Grand totals of units placed, both gas rental and gas and electric sales, are even more impressive. Eight hundred sixty-nine units, all told, went on the line in the six weeks; and for the entire six-plus months, 1086 heaters were placed. This was double the 1953 record, which up until May 1 would have appeared to be unattainable.

Blackstone executives knew they had a market, and knew where it was. According to Sales Manager John E. Pemberton, the company had been selling approximately 1000 water heaters per year. But there were an estimated 25,000 cold-water flats in the service area, where tenants were forced to rely on the teakettle for hot water. Neither the tenants nor the landlords were willing to lay out the capital investment required for modern automatic gas water heater service. Tenants were too transient and landlords were able to find tenants without providing the service.

The obvious solution was to install the heaters free of charge and levy a nominal rental charge on the tenant each month—\$2 per 30-gal. water heater. The soundness of this decision is attested to by the resultant sales and line load increase figures.

Executives of these three utility companies, before mapping out a definite rental plan, sat down and theorized on several issues. LPG dealers contemplating a similar program will be faced by many of the same questions confronting the utilities.

What group constitutes our greatest potential market? The home renter, who is unwilling to buy an automatic water heater composes the most likely prospect. Most tenants do not care to lay out the capital investment required to buy, yet can be interested in the conveniences of automatic hot water for the nominal figure of \$2 per month (or 6½ cents per day). Executives of one of the companies decided to limit rentals to domestic users only, because they reasoned that any commercial enterprise which felt the need of renting the heater represented a credit risk which they didn't wish to contemplate. Also, some unusual installation problems might be encountered.

Is it more economically feasible to

use top grade heaters or go to competitive models? The answer to this depends upon a number of factors. If the condition of the water in a particular area permits, a low priced galvanized heater may be selected with no woeful after effects. Should the manufacturer of a competitively priced model furnish, say, a 10 year replacement guarantee on a tank, this may be as satisfactory for the purpose as a more expensive type. Consideration should be given to that heater which is currently in greatest use in the area and which has proven itself the most satisfactory over a long period. John E. Pemberton, sales manager for Blackstone, explains

**No Shortage Here!**



There'll be plenty of  
**HOT WATER**  
for everyone when you

**RENT**

an Automatic **GAS Storage**  
Water Heater



Only **\$2.00**  
Per Month

RENT USE ENJOY

Close, sparkling hot water 24 hours a day in your home for ONLY \$2.00 per month. No down payment. No delivery charge. No installation charge. No service charge. No insurance charge. No gas company charge. No other charge. If you want to rent a gas water heater, call the Haverhill Gas Company today. Don't delay — call the GAS COMPANY NOW!

See the Haverhill Gas Company Show, Tuesday, 9 a.m. - 5 p.m., WEST-17, Haverhill 4

Office In:

HAVERHILL - AMESBURY - NEWBURYPORT - IPSWICH

**HAVERHILL Gas COMPANY**  
THE MODERN FUEL

# Haverhill Gas Light Company APPLIANCE LEASE AGREEMENT

Lease agreement dated ..... 19 ..... between Haverhill Gas Light Company, hereinafter called the "Company" and  
NAME .....  
PLEASE PRINT

STREET ADDRESS .....  
CITY ..... STATE .....

hereinafter called the "Customer."

Customer hereby applies to and requests Company to lease to Customer a 30 gallon Gas Storage Water Heater (hereinafter called the "Appliance"), for domestic use at the above address.

Customer agrees to lease from Company and Company to lease to Customer said Appliance, subject to the terms and conditions hereinafter contained.

1. Installation shall be provided by a Master Plumber approved by the Company and the Company will assume installation charges not to exceed \$..... Customer agrees to bear any installation charges in excess of such amount and to make payment therefore promptly upon receipt of a statement specifying such excess charges but in any event within 30 days after installation of the Appliance.

2. Company shall, at its expense, maintain such appliance in efficient operating condition.

3. Customer shall pay Company each month the sum of \$..... for rental of such appliance. The rental charge shall be due and payable on the due date of the utility service bill for the above location.

4. Customer assumes all risk of loss or destruction of the appliance during the term of this lease and agrees to indemnify Company against any such loss or damage. Customer further agrees not to remove, transfer, tamper with, adjust or repair such appliance without permission of Company. Cost of moving or relocating appliance for Customer shall be at Customer's expense.

5. Company, without prejudice to any other claims it may have hereunder, may terminate this lease and enter Customer's premises and disconnect and remove the appliance, if one or more of the following conditions exists: (a) improper use of the appliance, (b) satisfactory operation is not reasonably possible, or (c) Customer fails to pay rental charges as provided herein within 30 days after the above-mentioned due date. Company's failure to terminate this lease by reason of any default of Customer shall not constitute a waiver of any other right Company may have against Customer because of such default, nor a waiver of any subsequent default.

6. Customer may terminate this agreement by thirty (30) days written notice to the Company or by discontinuing service, but in any event surrendering the appliance to the Company in the same condition the appliance was in at the time of installation, ordinary wear and tear excepted.

7. Customer agrees to notify Company of any sale or transfer of the premises above described, and to notify prospective purchaser that title to the appliance is in Haverhill Gas Light Company or its successor.

Customer  
HAVERHILL GAS LIGHT COMPANY

By: .....

## LANDLORD'S CONSENT

The undersigned, owner of the premises referred to in the foregoing Agreement, hereby consents to the installation and use of the appliance referred to in such Agreement upon the conditions therein stated, including the right of Haverhill Gas Light Company to remove the same upon termination of said Agreement, it being the intent that such appliance remain the property of such Company at all times. It is further agreed that the present water heating equipment, if any, shall be set aside in such storage space as I may designate and Haverhill Gas Light Company will not be liable for any cost of reinstallation of said equipment upon termination of such Appliance Lease Agreement.

Dated: .....

Owner .....

Street .....

City or Town .....

R.F. 4086

some of the reasoning back of the choice of a 30-gal. heater costing approximately \$80:

"In 100 months we will have rental receipts of \$200, at a rental of \$2 monthly, for each heater which stays in service for that period. By this time the heater will be completely depreciated and we will have recovered more than our entire expenses including investment in the heaters, installation costs, sales and promotion expenses, service and maintenance costs as well as interest on our investment.

"In the meantime we will be receiving substantially increased revenues from gas sold to operate these heaters. On the basis of 1000 water heaters, which we hope to rent in the next 12 months, over and above our normal sales of 1000 heaters, our total costs in connection with this additional rental business for all expenses as mentioned above should be in the neighborhood of \$190,000. As this money is being invested, however, we will be receiving income from rental payments and also from in-

creased gas revenues so that at the end of a full year for each installation we will, for 1000 heaters, have recovered \$24,000 from rental payments plus an estimated \$35,000 in annual gross revenues. A good portion of this gross will naturally find its way down into net revenue and within a relatively short time we should be realizing a good profit from this rental activity.

"After the program has been underway for awhile, we undoubtedly will have an opportunity to convert many of these heaters to a sale basis."

*What happens if the tenants move away, leaving a rental heater behind?* A sensible sequence of steps to be taken in this case is to first learn where they have moved and try to capture their water heating load at the new address. Secondly, try to sell the already installed heater to the landlord on the grounds that the value of the property has been enhanced. Failing that, try to rent the heater to the new tenant.

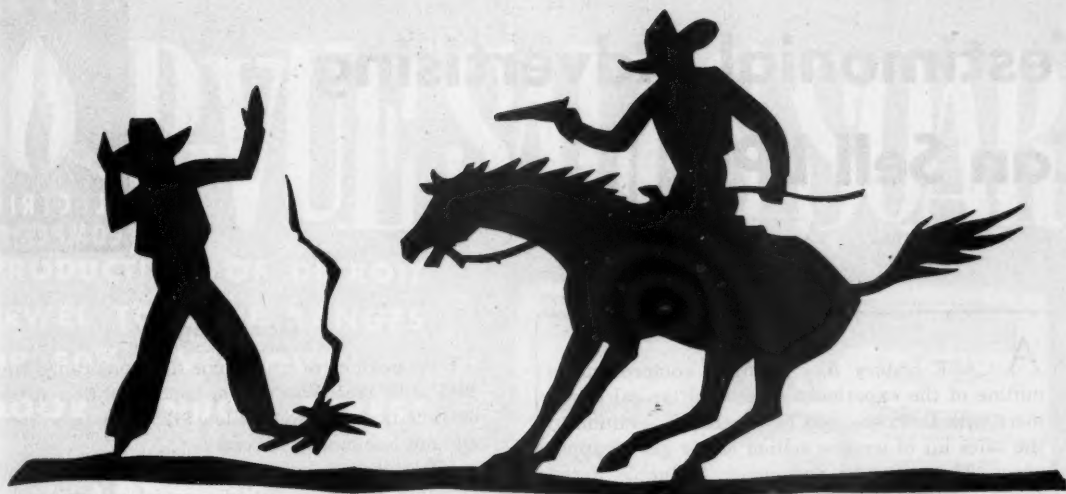
*Mightn't it better to combine a rental and purchase plan rather than*

*using a straight rental plan?* Let's see what Mr. McLaughlin has to say on this subject:

"We investigated several plans to promote automatic gas water heater sales that have been tried by other utilities such as long term purchase plans, rental purchase plans, and straight rental plans. It was decided that the straight rental plan would have the greatest appeal to our potential customers (renters). We felt that the word 'rent' in our advertising program would have its greatest effect if it stood alone without the suggestion of any possible future obligation to purchase the equipment. Pride of ownership doesn't seem to extend to water heaters, out of sight on the premises."

*How will the financing of the heaters be handled?* Some of the rental programs are being financed completely through company funds. However, there are several institutions which will finance such plans. To date, at least one manufacturer has agreed to finance the purchase of water heaters for rental purposes.





*Paul LeMay*

## *...losing money*

*NOW  
Something New—  
A Complete Insurance  
Program for our  
customers and  
their dealers*

Your business loses money when it fails to receive quality product at a competitive price. You are assured against such loss when you rely on the Sid Richardson Gasoline Co. for a dependable, year-round supply of top-quality LP-Gas at the right price.

The Sid Richardson Gasoline Co. is proud of its unbroken record of faithful delivery and for the better prices given its customers through earned bonuses. Become a contract customer of Sid Richardson Gasoline Co. and depend on us for your supply of top-quality LP-Gas at favorable prices—winter as well as summer.

Wire, write or telephone for complete information.

***Sid Richardson***  
**GASOLINE CO.**

**629 FORT WORTH CLUB BUILDING • FORT WORTH, TEXAS**

# Testimonial Advertising Can Sell LPG



A CASE history file, giving a comprehensive outline of the experience of several typical customers with L. P. gas, can be a valuable addition to the sales kit of anyone selling either gas or appliances. These can be particularly valuable if the names of the customers can be used, or can be made available on request.

This is an adaptation of the time-honored "testimonial advertising" idea. It builds confidence in the salesman's presentation, because it is not just the salesman's unsupported statement—here is what the neighbors say. Any LPG dealer can work up his own file of local case histories, and the file can be made larger and more impressive if two or more dealers in adjoining territories will collaborate by securing and exchanging this type of information. With a little patience and work, such a file can be built up covering almost any combination of family groups and appliances.

The Kentucky LPGA is working on this idea as an association project, mimeographing the reports and distributing the sheets to the membership. Three typical reports from their file follow. We direct your attention particularly to the statements regarding service costs on the gas appliances, and the use of gas for house heating during periods when electric service broke down, rendering the automatic oil furnace inoperative.

## Case History

### Mr. and Mrs. E. Jr.\*

Young Couple, Two Children

Young couple with two sons; eldest, 11 years; youngest, 2 years. Husband owns large trucks; is away from home two or three nights each week. Wife is active in PTA, Woman's club, church. Family have average number of house guests, mostly relatives. Lived in rental property until 1951, when they moved into new stone home, completely gas equipped, except for refrigeration.

Present equipment installed in 1951 in new home:

- Caloric CP gas range
- Ruud monel water heater
- Bryant forced air furnace
- Humphrey 5000 Btu bathroom heater

## Gas Usage

First equipment was Magic Chef gas range from 1947 until 1951. Was still in good condition at time of trade-in so that could allow \$125 trade-in on range and not lose money in resale.

(Cylinders used for heating up to present while awaiting bulk installation—special rate given)

Year	Lb
1947 (range installed in fall)	200
1948	400
1949	500
1950	500
1951 (heating begun—½ year)	3600
1952	5400
1953	4800

No cost of upkeep.

(\*Name furnished on request.)

## Case History

### Mr. and Mrs. T.\*

Active Elderly Couple

Two in family, elderly but very active, with a maid and a great many house guests.

Fifteen-room, two-story, frame home; heated with oil.

Tappan gas range installed in Nov., 1943.

Bryant water heater installed in Nov., 1945.

Thomson space heater installed in kitchen, Sept., 1947.

Humphrey space heater—24,000 Btu—installed in living room in Feb., 1949.

Servel 9-ft refrigerator with frozen food section installed in July, 1949.

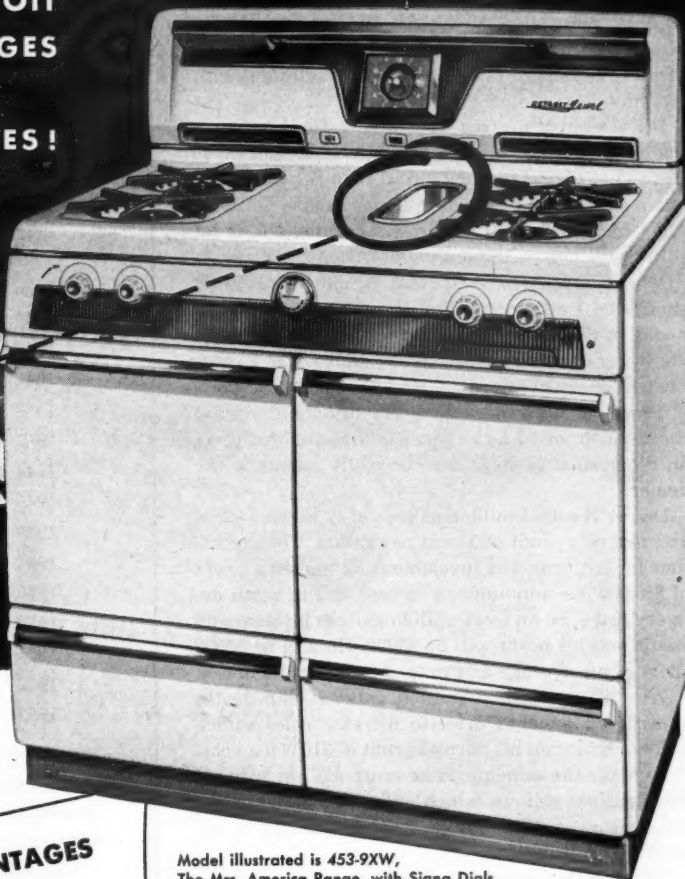
Humphrey space heater—15,000 Btu—installed in dressing-room in Dec., 1951.

## Gas Usage

Year	Lb
1943	200
1944	400
1945	700
1946	800
1947	1200
1948	1200
1949	1400
1950	1800
1951	1600
1952	1800
1953	2000

# TOP-VUE SALES SOAR

PRODUCTION OF DETROIT  
JEWEL TOP-VUE RANGES  
UP 50% OVER OVEN  
DOOR WINDOW TYPES!



## ATTENTION DEALERS!

We are expanding our distribution. Profitable opportunities are available for aggressive, sales-minded dealers. For full details send in coupon!

**LOOK AT ALL THE ADVANTAGES  
DETROIT JEWEL HAS TO OFFER—  
Plus a Wide Profit Margin!**

- ★ Exclusive Signa-Dials
- ★ Handee-Hi Infra Red Broiler
- ★ Titanium Porcelain Finish
- ★ Fully insulated, extra-large oven
- ★ Burners guaranteed for life
- ★ Automatic oven cooking
- ★ New, handsome gray-tone grates

Model illustrated is 453-9XW,  
The Mrs. America Range, with Signa Dials  
and Handee-Hi Infra Red Broiler.

Detroit-Michigan Stove Co.

Gentlemen:

I am interested in learning the complete details of a Detroit Jewel Dealership.

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Type of Business \_\_\_\_\_

Street \_\_\_\_\_

City & Zone \_\_\_\_\_

State \_\_\_\_\_

# DETROIT JEWEL

Products of the Detroit-Michigan Stove Co.  
Detroit 31, Michigan

Makers of the  
Famous Detroit Jewel Incinerator





# Testimonial Advertising Can Sell LPG



A CASE history file, giving a comprehensive outline of the experience of several typical customers with L. P. gas, can be a valuable addition to the sales kit of anyone selling either gas or appliances. These can be particularly valuable if the names of the customers can be used, or can be made available on request.

This is an adaptation of the time-honored "testimonial advertising" idea. It builds confidence in the salesman's presentation, because it is not just the salesman's unsupported statement—here is what the neighbors say. Any LPG dealer can work up his own file of local case histories, and the file can be made larger and more impressive if two or more dealers in adjoining territories will collaborate by securing and exchanging this type of information. With a little patience and work, such a file can be built up covering almost any combination of family groups and appliances.

The Kentucky LPGA is working on this idea as an association project, mimeographing the reports and distributing the sheets to the membership. Three typical reports from their file follow. We direct your attention particularly to the statements regarding service costs on the gas appliances, and the use of gas for house heating during periods when electric service broke down, rendering the automatic oil furnace inoperative.

## Case History

**Mr. and Mrs. E. Jr.\***

Young Couple, Two Children

Young couple with two sons; eldest, 11 years; youngest, 2 years. Husband owns large trucks; is away from home two or three nights each week. Wife is active in PTA, Woman's club, church. Family have average number of house guests, mostly relatives. Lived in rental property until 1951, when they moved into new stone home, completely gas equipped, except for refrigeration.

Present equipment installed in 1951 in new home:

- Caloric CP gas range
- Ruud monel water heater
- Bryant forced air furnace
- Humphrey 5000 Btu bathroom heater

## Gas Usage

First equipment was Magic Chef gas range from 1947 until 1951. Was still in good condition at time of trade-in so that could allow \$125 trade-in on range and not lose money in resale.

(Cylinders used for heating up to present while awaiting bulk installation—special rate given)

Year	Lb
1947 (range installed in fall) .....	200
1948 .....	400
1949 .....	500
1950 .....	500
1951 (heating begun—½ year) .....	3600
1952 .....	5400
1953 .....	4800

No cost of upkeep.

(\*Name furnished on request.)

## Case History

**Mr. and Mrs. T.\***

Active Elderly Couple

Two in family, elderly but very active, with a maid and a great many house guests.

Fifteen-room, two-story, frame home; heated with oil.

Tappan gas range installed in Nov., 1943.

Bryant water heater installed in Nov., 1945.

Thomson space heater installed in kitchen, Sept., 1947.

Humphrey space heater—24,000 Btu—installed in living room in Feb., 1949.

Servel 9-ft refrigerator with frozen food section installed in July, 1949.

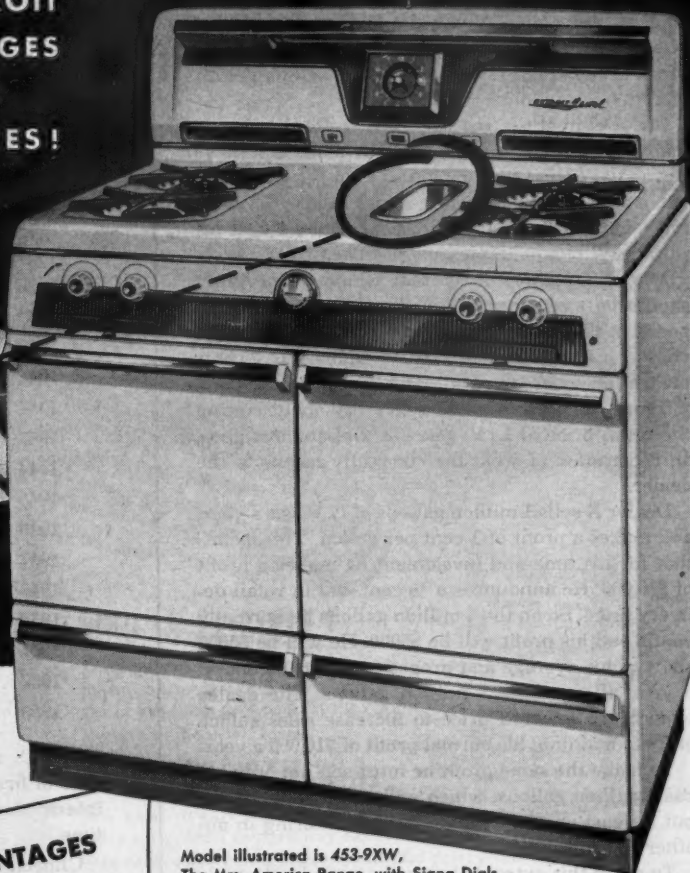
Humphrey space heater—15,000 Btu—installed in dressing-room in Dec., 1951.

## Gas Usage

Year	Lb
1943 .....	200
1944 .....	400
1945 .....	700
1946 .....	800
1947 .....	1200
1948 .....	1200
1949 .....	1400
1950 .....	1800
1951 .....	1600
1952 .....	1800
1953 .....	2000

# TOP-VUE SALES SOAR

PRODUCTION OF DETROIT  
JEWEL TOP-VUE RANGES  
UP 50% OVER OVEN  
DOOR WINDOW TYPES!



## ATTENTION DEALERS!

We are expanding our distribution. Profitable opportunities are available for aggressive, sales-minded dealers. For full details send in coupon!

**LOOK AT ALL THE ADVANTAGES  
DETROIT JEWEL HAS TO OFFER—  
Plus a Wide Profit Margin!**

- ★ Exclusive Signa-Dials
- ★ Handee-Hi Infra Red Broiler
- ★ Titanium Porcelain Finish
- ★ Fully insulated, extra-large oven
- ★ Burners guaranteed for life
- ★ Automatic oven cooking
- ★ New, handsome gray-tone grates

Model illustrated is 453-9XW,  
The Mrs. America Range, with Signa Dials  
and Handee-Hi Infra Red Broiler.

Detroit-Michigan Stove Co.

Gentlemen:

I am interested in learning the complete details of a Detroit Jewel Dealership.

Name \_\_\_\_\_

Title \_\_\_\_\_ Company \_\_\_\_\_

Type of Business \_\_\_\_\_

Street \_\_\_\_\_ City & Zone \_\_\_\_\_ State \_\_\_\_\_

# DETROIT JEWEL

Products of the Detroit-Michigan Stove Co.  
Detroit 31, Michigan

Makers of the  
Famous Detroit Jewel Incinerator



# Don't Cut Prices!

A FEW facts about the actual cost of hauling L. P. gas and an experiment of his own have convinced George DeLaughter that cutting the retail price of L. P. gas is one of the most suicidal things any dealer can do.

Mr. DeLaughter of DeLaughter Butane Co. in Sparkman, Ark., experimented at his two stores by raising the price of gas at one of them from 12 to 13 cents per gallon. When the books were audited later at both stores, there was a difference in net profit of \$13,019.87 favoring the store selling gas for 13 cents per gallon.

Mr. DeLaughter recently heard Henry Wieckman, vice president of Skelgas, cite some figures on the actual cost of hauling gas: 1 cent per gallon for truck expense; 1.2 cents for driver salary; 1.2 cents for general overhead and insurance, and 1 cent for storage. Which makes a total of 4.4 cents per gallon.

Mr. DeLaughter feels that a minimum profit should be 1 cent per gallon if a firm is to keep its books in the black. If gas costs 7 cents delivered to your storage, you must sell for at least 12.4 cents per gallon to break even, let alone make a profit.

There has been much said recently about cutting the retail price of L. P. gas. Mr. DeLaughter gives an illustration of what the cut really means to the dealer.

Dealer X sells 1 million gallons of L. P. gas a year, and makes a profit of 1 cent per gallon. This means that for his time and investment he makes a profit of \$10,000. He announces a ½-cent cut in retail delivery price. So on the 1 million gallons he normally would sell his profit will be \$5000. He will be \$5000 short of his average and proper profit at the end of a year after selling 1 million gallons. The dealer expects his lowered price to increase sales sufficiently to maintain his normal profit of \$10,000 a year.

To make the same profit he must sell not only his basic million gallons, which will mean \$5000 profit, but at least another million gallons to bring in another \$5000 profit.

To move this extra gallonage he must haul, store, sell and deliver just twice as much as he formerly handled. He must work his equipment twice as much, or increase equipment. He must double his service facilities and be prepared all along the line for a doubled effort. He may get that extra \$5000, but even then it is not an extra \$5000. The dealer is right where he started profit-wise.

Mr. DeLaughter stresses another fact. There is just so much gas business, actual and potential.

Arkansas Power & Light Co., the Arkansas dealers' chief competitor, has applied to the Public Service Commission for an increase in rates. The L. P. gas industry should never think it can operate cheaper than a natural gas utility.

Adapted from a speech given by George W. DeLaughter, DeLaughter Butane Co., Sparkman, Ark., before the Arkansas Butane Dealers Association convention, June 6-8, 1954.

With installation of oil heating in 1950, family depended on L. P. gas heaters in kitchen, bathroom, and living room during periods of storm, when electricity would be off and electrical equipment on oil furnace would not work.

Cost of upkeep during past ten years—nothing. All appliances in good operating condition.

(\*Name furnished on request.)

## Case History

Mr. and Mrs. C.\*

Elderly, Retired

Magic Chef gas range installed in May, 1937.

Servel gas refrigerator installed in Nov., 1937.

Ruud water heater installed in May, 1945.

A 20,000 Btu space heater installed in Oct., 1950.

## Gas Usage

Year	Lb
1937	300
1938	700
1939	800
1940	900
1941	900
1942	1000
1943	800
1944	800
1945	1000
1946	1000
1947	1300
1949	1300
1950	1400
1951	1400
1952	1200
1953	1400

Mr. C. was railroad engineer; now retired. At time of first installation five children were at home intermittently; away at school, in college, part of time.

Church wedding of youngest daughter in 1942 built up usage for this year.

Mother became semi-invalid following loss of son in early part of World War II.

Oldest daughter and husband returned from Indiana in 1945 at which time this daughter began practice of doing both family washes at the home of her parents because they had thermostatically controlled hot water.

Family, also, had part-time help intermittently from 1945.

Total cost of upkeep during 17 years—

1 Servel refrigerator thermostat and 1 refrigerator gasket: \$10.43.

No service charges of any kind during this time.

All equipment in good condition at end of 17 years.

(\*Name furnished on request.)



# \$10,500 in PRIZES!

SENSATIONAL  
NEW

## ROPER

### "SCORE MORE" NATIONAL SALES CONTEST

*This contest is not open to the public. It is limited to those engaged professionally in selling Roper Gas Ranges at the retail level*



#### 1ST PRIZE

1955 CHEVROLET  
CONVERTIBLE . . . PLUS  
an all-expense paid  
trip to the Roper plant  
in Rockford, Illinois



#### 2ND PRIZE



#### 3RD PRIZE



**plus . . . 60 prizes**  
totaling \$6,500.00 . . . and  
any one of them can be yours.  
First, second and third prizes  
will be awarded in each  
ROPER Sales District.

**ROPER "SCORE MORE" CONTEST**  
P. O. BOX No. 5995  
CHICAGO 77, ILLINOIS

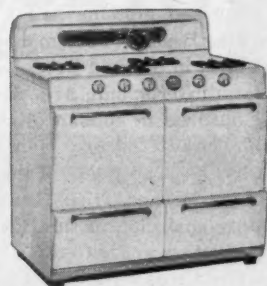


#### WHO IS ELIGIBLE?

Only professional sales personnel  
in the continental United States who  
are engaged in selling ROPER Gas  
Ranges at the retail level.

#### YOU, TOO, CAN WIN

It's easy! It's fun! It's profitable!  
Here's a golden opportunity for sales-  
men to win any one of these wonderful prizes totaling  
more than \$10,500.00. It's another industry "sales stimulator"  
sponsored by ROPER, manufacturers of "America's Finest Gas  
Ranges" . . . Performance Proves It! Fill out the coupon for complete  
contest details. But hurry! Big prizes are waiting to be won.



#### SALES MANAGERS:

**WRITE TODAY FOR COMPLETE CONTEST DETAILS**

I am interested! Please send me complete details on how to enter  
my salesmen in the ROPER "Score More" National Sales Contest.

Company Name.....

Address.....

Individual's Name.....

City.....State.....

BP9

**Rotary Club, Boy Scouts, athletics, charities — these and other activities have helped the civic minded mayor of Marked Tree build a profitable butane business.**

## Civic Activities Can Mean Big Business

By Emmett Maum

**E**VERYBODY in northeast Arkansas knows Kohn Bray. The moment his name is mentioned, folks there can tell you instantly that Mr. Bray was an athlete at Arkansas College in Batesville, later a builder of football and girls' basketball teams at Marked Tree high. And now he is doubling as mayor of Marked Tree and owner of the Kohn Bray Butane Co.

From these activities and a host of others, and the business acumen of Mr. Bray, has come a firm selling more than 3 million gal. of L. P. gas a year and grossing half a million dollars. Besides the company which operates in Marked Tree, there is a branch in Trumann, Ark. Both do a big business in appliances also.

Mr. Bray is a busy civic worker. He has been president of the Rotary club at Marked Tree; Craighead county chairman of the Boy Scouts organization and extension committee, Red Cross water safety program, Arkansas public expenditure council,

and 1952 March of Dimes; chairman of the Methodist Church Memorial committee; on the church's board of stewards; member of the Arkansas Butane Dealers Association's board of directors; scoutmaster, city clerk, coach, and finally mayor of Marked Tree the past two years.

While Mr. Bray certainly does not engage in all these activities for the sake of business, it is certain that a man doing so much for his community will attract business. Long before he went into business, he was working for the betterment of his city and county.

"You make a world of friends through athletics," says Mr. Bray. "But through the years when I was coaching, I didn't realize that some day people all over our section would be excellent business prospects. They were—and are—just good friends of mine. But it is a natural thing for people to do business with those whom they know and like, so I got a lot of customers that way."

For example, one day the owner of a large plantation a few miles from Marked Tree telephoned. He explained that he had built some homes on his property for his employees and was interested in buying six new water heaters.

"I talked to him about five minutes, telling him about the merchandise we carried, the good points about our heaters, and our guarantee of complete satisfaction," said Mr. Bray.

The plantation owner then asked

him to have the six water heaters installed as soon as possible.

"He was a man I met while coaching," Kohn Bray remarked. "When we played in his town or his teams came to our town, I would see him and we became good friends through the years."

Kohn Bray starred in football and basketball while at Arkansas College. When he took over Marked Tree coaching, the school started a golden area. He coached both boys and girls for 11 years, winning games and capturing championships.

In 1947 he decided to go into business. "I had no previous connection with either L. P. gas or selling," he said. "But I figured that this business, in the midst of a farming section, could thrive if I would really work at it."

Many of Mr. Bray's connections resulted in business for him. Through his Boy Scout work he made the acquaintance of a prominent business man in Trumann who became one of his customers. While carrying on business at the Rotary club, he met a man who owned four cotton gins. Friendship undoubtedly helped him get the man's business. Mr. Bray sells this customer over 100,000 gal. of L. P. gas a year now.

There are dozens of cases where friends and customers have resulted from Kohn Bray's sports activities. For three years after opening his firm, he continued coaching. In the afternoon he held practice and at night he sold.

"Coaching proved most helpful to me," he says. "When you coach, everybody knows you, not only in your own town, but in others as well. We had strong teams and were in

**Kohn Bray** points out his champion girls' basketball team with Helen Morrisett, whom he calls "the greatest guard I ever had," looking on. Mrs. Morrisett is now one of his employees.



Typical modern LP-GAS installation by Suburban, featuring dependable, accurate measurement with American 28-40 meter. Inset shows close-up of meter.



## SUBURBAN means SERVICE...

26 years plus—supplying LP-Gas

### HOW GIANT PIONEER SUPPLIER USES METERED SERVICE IN 16 STATES

Starting 26 years ago with but one customer, Suburban Propane Gas Corporation has become a giant multi-million dollar organization. Operating in 16 eastern states still under the guiding hand of its founder and president, Mark Anton, the company serves every LP-GAS need... is the largest independent marketer of LP-GAS anywhere. Pioneering in the use of gas meters for LP-GAS with the co-operation of the American Meter Company, Suburban

now provides over 240,000 of its customers with "city-type" service by modern LP-GAS meters.

You too, can give your customers "city-type" service, stop out-of-gas deliveries, build customers' confidence in your service, as well as help solve storage problems during peak demand periods. And metered service helps sell more gas and more appliances. For information write for a FREE COPY of "Guide To LP-GAS Metered Service."



**AMERICAN**  
METER COMPANY  
INCORPORATED ESTABLISHED 1928



GENERAL SALES OFFICE: 1513 Race Street, Philadelphia • Albany  
Alhambra • Atlanta • Baltimore • Birmingham • Boston • Chicago • Dallas  
Denver • Erie • Houston • Kansas City • Los Angeles • Minneapolis  
New York • Omaha • Pittsburgh • San Francisco • Seattle • Tulsa  
IN CANADA: Canadian Meter Company, Limited, Hamilton  
Edmonton • Calgary





Kohn Bray Butane Co. has an incentive sales plan, giving an extra month's pay twice a year when profits are up substantially. Here Mr. Bray presents a bonus check to an employee.



A prospective customer is shown the merits of a gas range by store owner Kohn Bray. Company has a complete line of appliances on display.

the center of the spotlight. That helped, too."

As a matter of fact, in citing the three chief reasons for his business success—building from a net capital of \$3000 to more than \$200,000—Mr. Bray heartily credits his coaching experience.

"When I went into business, I used my knowledge of athletic directorship and coaching to organize my departments and make the firm operate with top-grade efficiency. In my opinion, operating an athletic program in a school and handling a business are much the same. Both are failures unless you plan well, have the right people in the right places and have an overall head to supervise the entire operation.

"Athletics gave me a real start, for I found that through coaching I came to know most of the big business men in the area our firm was to serve. These men became our customers and gave us many good prospects.

"Our incentive plan stimulates business and keeps our personnel happy. If profits are up considerably, we give each employe an extra month's salary twice a year—around June and at Christmas. As a result, our employes work hard and try to get new business as well as to hold the business we have. They keep the firm's interest at heart as well as their own, and everybody profits from it."

Mr. Bray has his business divided into four departments—sales, fuel delivery, installation-service, and book-keeping. Competent people are paid well to head these divisions and Mr. Bray supervises the entire business.

While he seldom goes out to sell, he is constantly in the midst of business transactions.

"Most of my selling is done by telephone," he says. "People I know quite well will call me and often we can sell them without going to see them. But on many occasions, I merely pave the way for one of our salesmen to visit them and make the sales."

Being an educator has paid off handsomely for Kohn Bray now that he is an LPG firm owner. His company does a large amount of school business, both in gas and appliances. Among schools he serves are Marked Tree, Earle, Trumann, Shawnee, Valley View, Tyronza, Whitaker, Bay, Weiner, Bondsville and Whitten.

A new avenue of income is developing in the northeast section of Arkansas where rice paddies are becoming big business. The Kohn Bray Butane Co. is taking advantage of it by changing stationary engines used for rice field pumps to L. P. gas.

The company has four delivery trucks for gas. "We go no more than a 25-mile radius from our Marked Tree and Trumann bases," says the owner, "and we feel this arrangement is economical."

The firm does its own conversions. Kohn Bray Butane Co. services about 125 tractors. On one plantation alone it handles 26 tractors, 10 trucks, 2 combines and 8 rice field pumps. It has changed over caterpillars for pushing stumps, building roads and pushing ditches.

Mr. Bray advertises regularly in the newspapers of his area's towns. When Marked Tree high school ath-

letic teams are in tournaments, he sponsors play-by-play radio accounts of games. He advertises in school papers.

Each fall, the firm sends out calendars to all 3000 customers on the books. At Christmas, every one of them receives a greeting card. The company has a list of the small churches in the section which have no air-conditioning and provides them with fans that have Biblical pictures on one side, an advertisement of the butane company on the other.

The salesmen realize they are dealing with friends and neighbors. They stress friendliness, courtesy and assurance of service and complete satisfaction. They will not have a dissatisfied customer if there is any possible way to prevent it.

After appliances are installed, the salesmen return to the homes or schools in a few weeks. "They check to see whether the appliances are all right," says Mr. Bray. "Our men ask whether the appliances are living up to the things we said about them before the sales. When the customer is satisfied we ask for names of others who might be interested in buying."

The firm often sells several other appliances. "All too many firms lose business and repeat customers simply because they don't have enough ingenuity to follow up. We have always realized that you can't simply sell a customer, then forget her.

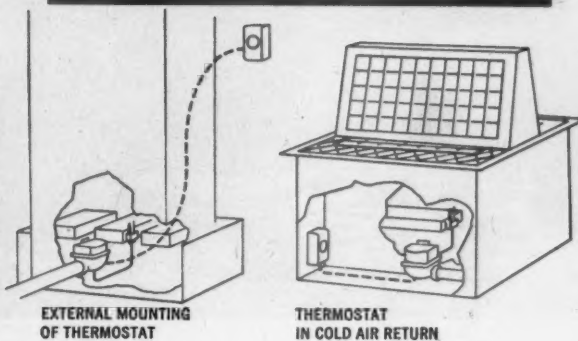
"The best advertising we have, and the best salesmen, are our satisfied customers. The best part is that they don't cost you any money, but they make money for you."

**Here's compactness  
and dependability  
in a low cost control  
...for small  
gas heating appliances**

**General Controls**  
**BX**  
**100**  
*Self Powered*  
**Control System**



The above illustration does not show cable or bushing connectors furnished as part of the BX-100 set. The thermostat may be mounted with baffle in the cold air return or adjacent to small heating appliances.



For automatic control of wall heaters, floor furnaces and console heaters the General Controls BX-100 self-powered control system can't be beat. Here in one system is thermostatic temperature, safety and flow control, completely independent of any outside power source. The BX-100 set consists of three elements. (1) The silent, compact automatic B-60R gas valve which operates in any position. (2) The G-250 (250 millivolts) generator adaptable to standard General Controls pilot burners. (3) The T-100 thermostat with General Controls exclusive thermopoised contacts. This control can be installed in a cold air return or can be located adjacent to the heater with cover and back plate for mounting.

Accessories include armored wire cables fitted with bushing connectors for easy installation of the G-250 Generator and T-100 Thermostat. Simple to install, completely self-powered and available with 100% automatic safety shutoff, you can't beat General Controls' BX-100 Control System for compactness, low cost and dependable operation in small gas heating appliances. For further information, request Bulletin SDI-BX100-1.

**GENERAL CONTROLS**



Plants in: Glendale, Calif., Burbank, Calif., Skokie, Ill.  
Factory Branches in 38 Principal Cities  
SEE YOUR CLASSIFIED TELEPHONE DIRECTORY

Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls for Heating, Home Appliances, Refrigeration, Industrial and Aircraft Applications

There are no doubt many ways to build business, but the method which we all hear the most about is what might be called the aggressive sales technique. This involves a positive attempt to SELL L. P. gas, equipment and appliances, and usually brings a commission or bonus to the salesman.

Below is another method which has not had as much attention. Livingston's, a small butane dealership in Texas, has built an 800,000-gal. volume on the theory that he who SERVES best sells most.



Routeman for Livingston Plumbing fills suburban customer's tank. Company stresses service and safety.

## Service First — Sales Later

RECENTLY a farmer living several miles outside the little unincorporated community of Shepherd, Texas, telephoned Livingston Plumbing & Sheet Metal Works, a butane dealer in Livingston, and asked if the company would fill his tank.

There was no record of this customer on the Livingston firm's book and obviously the tank and initial fuel had been sold by some other concern. But to Livingston that made no difference. A driver took his truck 19 miles out and the same distance back and filled the farmer's tank, which held 25 gal.

To Ernest Reuter Sr., owner, and L. W. Collins, assistant manager of Livingston Plumbing & Sheet Metal Works, this was merely routine. But

it wasn't routine to the farmer. He was amazed that a firm that had never heard of him and had never sold him anything would drive that distance to serve him in an emergency when his regular butane dealer wasn't able to deliver to him.

The farmer told a lot of people about his experience. As a result the company has picked up a lot of new business in the Shepherd area. And the same basic policy has built business wherever the company's three drivers go.

Mr. Reuter has been in the plumbing business for 45 years, in the butane business 15 years. He pioneered butane in his section of east Texas, and he initiated his business on the basis of safety and service, taking a

page from his experience book in the plumbing business.

Being a practical plumber, Mr. Reuter recognized the value of proper and safe installations for butane systems from the start. He uses journeymen plumbers for all installations and for all major repairs.

"It's not a job for a route man with no plumbing experience," Mr. Reuter stresses. "Safety is one of our big selling factors, and to maintain it we can't afford to take chances with inadequate installations and major changes and adjustments."

Because of the confidence of the public in the company's installations and maintenance service, the firm installed nearly all the butane systems in the county schools and continues





*"You see POWELL VALVES everywhere!"*

Not surprising when you realize that Powell makes more kinds of valves and has probably solved more valve problems than any other organization in the world. And this has been going on since 1846.

Wherever flow requires dependable control,

there's the place for Powell Valves—available through distributors in principal cities. Made  $\frac{1}{8}$ " to 30" and 125 pounds to 2500 pounds W. S. P. Bronze, iron, steel and corrosion resistant alloys. On problems, write direct to The Wm. Powell Company, Cincinnati 22, Ohio.

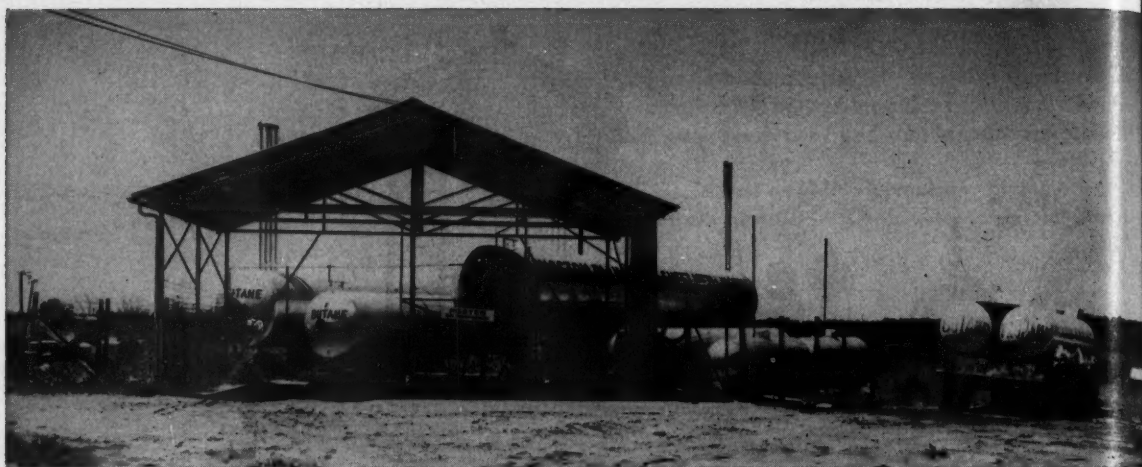
#### CONTROLS FOR THE LIFE LINES OF INDUSTRY

You'll find just the valve you need in the complete line of Powell Valves—approved by The Underwriters Laboratories!



# Powell Valves

*108th  
year*



**Bulk plant** at Livingston Plumbing & Sheet Metal Works in Livingston, Texas. The company has been in the plumbing business for 45 years, in the butane business for 15 years.

to sell them gas. Offers of price shading have no appeal to school officials, because they recognize the vital importance of safety in school gas systems and they have confidence in the Reuter policy.

Safety is not an idle talking point for the company. In its 15 years of installing butane systems and servicing them, it has never had a fire or explosion in one of its installations.

The company maintains an installation crew, all practical plumbers, who handle all tank installations and connections to various appliances and other units. They not only are experienced plumbers but they have made a special study of butane installation requirements, so that when they install a tank and hook up the lines for the use of gas, there is no doubt about the system's safety. It costs the company more to maintain this crew of specialists, Mr. Collins points out, but it pays off in safety which, in turn, pays off in sales.

Another crew handles all major service calls. These men are plumbers, and the company utilizes them in regular plumbing operations when they are not needed in the butane department. But their first obligation is to customers of the butane business.

The route men make only minor adjustments, but they know enough about their installations to detect a need for major service and adjustments and notify the company at once of any such needs, so that a service man may be sent out to take

care of the problem immediately.

The company's compensation plan fits right into its policy of building gas business on service, maintenance and safety. All three route men receive flat monthly salaries. The company makes no financial inducement to them for selling additional gas, new installations or appliances.

"We know we are missing opportunities to increase volume in some areas by failing to offer bonuses," explains Mr. Collins, "but we hold to this straight salary plan deliberately, because we believe it furthers our service, maintenance and safety policies. As it is, a route man doesn't hesitate to take the time to inspect a customer's plant when he makes a delivery. By checking the plant each time he makes a delivery, he detects any minor or major adjustments that are needed. If the work is only minor, he does not mind taking the time to make the adjustment.

"But if he worked on some sort of incentive plan for greater sales, he would be inclined to rush through with each delivery, so he could get to the next one and increase his volume and earn a greater commission or bonus. We have no criticism to make of the various incentive plans, but they're not for us because of our basic plan of building long-pull business."

The same basic reasoning keeps the company from paying a bonus on the sale of appliances, and the firm does an excellent appliance business. It pays the route men nothing for tips

on prospective sales, although it makes it clear to the men that it is a part of their jobs to report such opportunities; and the maintenance and installation men receive no bonuses on work done, because Mr. Reuter's policy calls for thoroughness rather than speed in maintenance and installation.

Appliance sales result from the efforts of Mr. Collins and Mr. Reuter, mainly to prospects who are invited to the store, either by the route men, service men or a member of the firm.

"We have done no outside selling so far," Mr. Collins says, "but that does not mean that we may not have outside salesmen in the future. If we do, they will be on salary."

This all-out attention to service, maintenance and safety pays off in many recognizable ways, Mr. Collins points out.

For example, last summer another dealer approached the board of one county school and offered a substantial discount on a complete butane system offered by the dealer. It was a good system and the company was reliable. But the board turned down the offer without hesitation.

"Most other county schools are using Mr. Reuter's butane systems and service because of the reputation of the technically skilled men who install and maintain the systems. We can't afford to take a chance on the safety of school children merely to save money on the cost of an installation," one board member explained after the installation was operating.

# Salesmanship *and* Tubemanship

**I**N BUSINESS, as in boxing, one of the most useful weapons is still a good "one-two combination."

A combination, for example, like Salesmanship and Tubemanship.

Your customers are ultra-modern and take such things as jet power, atom power and supersonic speed right in their stride. But when it comes to such values as "top-quality" in the things they buy, they're just as old fashioned as their ancestors. That's as it should be! Because the same insistence on quality, by the customer, has made American industry "go all out" in its efforts to please. It is one of the reasons the products of this nation are so good and our standard of living so high.

But in order to convince your customers that the things you sell are good—you and your salesmen—must know your products. That's where Tubemanship teams up with Salesmanship.

Tubemanship, you see, is a Wolverine word. It

stands for quality, years of experience, fine equipment, research and imagination plus the pride good men take in work well done.

So when a customer asks about copper tube, be sure to recommend Wolverine. Because of Wolverine's Tubemanship you're well armed with strong sales points to use in your sales efforts.

Tell him, for example, about Wolverine's quality control program. How every foot of Wolverine copper tube must meet rigid inspection specifications. Tell him, too, that because of this he's sure—job-after-job—of getting tubing that is always consistent, easy to bend, in the shop, or on the job. Tell him, too, about the painstaking care that Wolverine takes in making sure that its copper tube is always dry—always clean.

And while you're telling him these things rest assured that we, too, have a message for him. In full page advertisements, direct mail pieces, on our cartons, at trade shows and conventions we're telling your customers to **BUY FROM YOUR WHOLESALER.** We've said it more than 8,000,000 times so far! **WOLVERINE TUBE,** Division of Calumet & Hecla, Inc., 1453 Central Avenue, Detroit 9, Michigan.



**WOLVERINE TUBE**  
DIVISION OF CALUMET & HECLA, INC.  
*Manufacturers of Quality-Controlled Tubing*

PLANTS IN DETROIT, MICHIGAN AND DECATUR, ALABAMA. SALES OFFICES IN PRINCIPAL CITIES

EXPORT DEPARTMENT, 13 EAST 40TH STREET, NEW YORK 16, N. Y.





Interior view of White Butane Co. Mr. White met competition from REA and natural gas, held his own, and now sells about \$100,000 worth of butane appliances annually.

## In REA and Natural Gas Territory . . .

# White Makes \$100,000 on Appliances

By Ruel McDaniel

**Y**OU might think that it's time to seek greener sales pastures when both REA and natural gas distributors move in on your territory, for these two elements are not supposed to mix profitably with butane. Yet when they both moved in on S. B. White, owner of White Butane Co., Ruston, La., instead of seeking other outlets, he stayed right on the spot and met competition with a little competition of his own.

As a result, White Butane Co. sells about \$100,000 worth of butane appliances annually, in addition, of course, to its gas volume.

With butane service Mr. White went into rural territories still looking to the kerosene lamp for light and wood for cooking and heating, and developed several profitable bu-

tane routes; and he followed this pioneering with intensive appliance selling.

He did such a good job, in fact, that REA and natural gas interests took notice, saw that enough people on certain White routes were sold on the values of modern utilities for them to go in and do some selling of their own. The result has been that several White routes have been practically paralleled with either or both REA lines and natural gas facilities.

To meet this competition, Mr. White has done two things:

First, he tightened his sales belt and instead of withdrawing from the territories "pirated" by the electrical and natural gas interests he sold more intensively.

Second, he went farther into the rural areas and built new routes, ultimately to be taken over, he presumes, by the electrical and natural

gas folks. But he's not worrying too much. He still sells butane and butane appliances right along the right-of-way of REA and natural gas lines.

He sells appliances by the use of an occasional outside salesman, but mainly he relies on his own truck salesmen to keep appliances moving.

When REA and natural gas moved in on White routes, Mr. White and his men faced the competition realistically and sat down and formulated what they could of an argument to overcome the competitive selling. Naturally, the arguments did not save all White customers, but they saved some and opened the way for selling additional customers on the same route—people who had signed up for neither REA nor natural gas and were still open as potential butane customers.

Whenever figures proved butane economy over natural gas or electric

STORAGE TANKS  
LPG, Anhydrous Ammonia  
and Gasoline

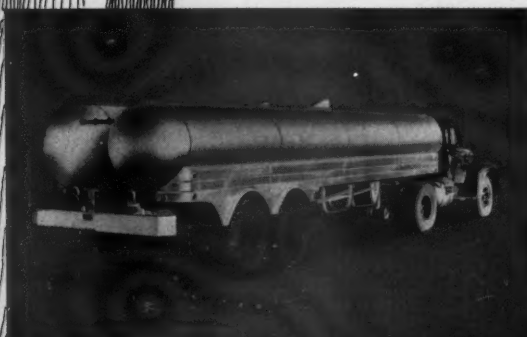
LPG and  
Gasoline  
FUEL TANKS

From the Great Southwest...

REFINERY VESSELS

# Masterpieces of steel construction

A few examples of production and custom steel fabrication, designed and produced by the facilities of Master Tank & Welding. For any requirements, write, wire or phone. We also warehouse steel plate.



LPG and  
Anhydrous  
Ammonia  
TRANSPORT  
TANKS



ANHYDROUS AMMONIA SYSTEMS

API 5LX  
EXPANDED LINEPIPE  
20" - 30" Diameter

LPG  
DOMESTIC  
SYSTEMS



P. O. Box 5146 • Dallas, Texas • PRospect 2441

ity, the company naturally leaned heavily on figures; where figures did not show up too favorably for butane, the company stressed quality appliances, flexibility of butane services and the fact that the customer already had his premises piped and fitted for butane service. In some cases the argument saved the customers from competition.

Mr. White also finds that electric and natural gas competition is not all "evil." On more than one occasion, the White organization has been able to sell butane services and appliances to neighbors of persons who signed up for REA and natural gas. The convenience of these utilities made the non-using neighbors dissatisfied with kerosene and stove-wood, and the White organization was able to translate this dissatisfaction to butane.

"To create the desire for modern utilities is the first step in selling either butane or natural gas and electricity," Mr. White says, "and when some competitive utility can help to perform this basic job, it's all to the good. We did the job for these competitors, and it is only fair that they help us sell others, through creating dissatisfaction with archaic facilities."

Mr. White does not keep an outside appliance salesman on his staff all the time. When he is ready to open a new route and needs extra selling quickly, he employs a reliable salesman to help do the job. He pays the

man a straight commission of 10% on appliance sales, and he sells appliances only. Obviously, he works closely with the truck salesman.

Basically, Mr. White has always relied on his truck salesman as the backbone of his appliance selling effort. He thinks they're the logical men to do the job, for they know their routes, their individual customers, new prospects, and they know butane and what it will do.

Although most of them were short on salesmanship, at least in the beginning, Mr. White has been able to overcome that by personal instruction in selling. He believes that selling to rural people is more lasting when done on a "low-pressure" basis, and he finds that a route salesman who knows his prospect can more than overcome any salesmanship weakness he may have by his sincerity and the confidence that the prospect has in him because of his service to him or his neighbors.

The company finds that stocking and featuring well-known names in appliances helps to sell in non-competitive territory as well as to meet REA and natural gas competition. Accordingly, he carries two appliance lines, both nationally known, and his truck salesman talk quality consistently in selling appliances.

At present the company has three regular truck salesmen. All push appliances. They make a commission of 5% on all appliances sold, which is a monetary inducement, in addi-

tion to the urgency to sell in competition to the recent "invaders."

Although the routemen watch for appliance prospects the year-round, they really bear down on appliance sales in summer, when demand for butane is lighter. When they have spare time during off-seasons, the men take to their routes in their cars or trucks, as convenience dictates, and call house-to-house in search of new appliance prospects as well as new outlets for gas.

Their regular customers report new citizens in any given area, and the company makes it a point to see these new arrivals at once, for either gas service or appliances, or both, as the prospect's needs demand.

Major appliance sales cover heaters, ranges and refrigerators. Although all are pushed all year, the routemen concentrate on seasonal items prior to and during the opening of the season for the specific appliance, utilizing all possible spare time for this effort.

Truck salesmen are accustomed to work on an incentive basis, and hence it was easy for them to recognize the value of appliances as a means of increasing their earnings.

Each man receives a salary of only \$150 per month, considered to be rock-bottom living expenses. In addition, he receives a commission of one cent per gallon on all gas he delivers. Thus, to make money, the truck salesman must train himself to think in terms of personal initiative and extra selling effort. Selling appliances for a commission of 5% came naturally.

When a truck salesman locates a prospect for appliances and does not sell him at once, he lists the prospect's name, address and telephone number at the office, and the record remains here indefinitely. If the prospect should come in later and buy appliances, the salesman receives credit. But to merit this consideration, the salesman is expected to make a call on the prospect once a month or more often, as the situation suggests.

Although the company sells appliances on the usual time payment plan, all gas sells for cash.

"You can repossess an appliance if the customer doesn't pay for it," Mr. White says, "but you have no way of recovering used butane."



White Butane Co., located on a main highway at the edge of Ruston, La., uses window display to attract customers and depends somewhat on drop-in business.



Let's make SAFETY Everybody's Business

com-  
h for  
ound,  
ance  
d for  
have  
the  
their  
dic-  
e in  
pects  
eport  
and  
o see  
either  
h, as

heat-  
Al-  
the  
onal  
pen-  
c ap-  
pare

ed to  
and  
ecog-  
as a  
ings.  
only  
o be  
ad-  
n of  
de-  
the  
lf to  
ative  
ap-  
ame

es a  
not  
pros-  
none  
cord  
ros-  
buy  
ives  
der-  
d to  
ce a  
situ-

appli-  
ment  
ce if  
Mr.  
y of

ews



SAFETY  
PROGRAM



## HOW TO USE THE SAFETY EDUCATION SERIES

This suggested program is a guide for the next SAFETY MEETING, based upon Article No. 19, "Safety in Delivery Truck Design, Maintenance and Operation." After the meeting the SAFETY POSTER which appears on the opposite side of this page should be posted on your bulletin board as a reminder for the meeting to follow, based upon the article in this issue, "Safety in Installing and Operating Carburetion Systems."

# Suggested Program for Safety Meeting

## For "Safety in Delivery Truck Design, Maintenance and Operation"

- 1—Complete the attendance record, noting the absentees.
- 2—Unfinished business. Report progress or disposition of all safety projects that were suggested or remained incomplete at the last safety meeting.
- 3—New Business. Are there any new ideas or suggestions that might make operations safer either at the plant or at customers' premises? The winter delivery season is coming up; how about getting the delivery trucks fixed up, safety-wise and otherwise, so they can go through the winter without being laid up because of work that could be taken care of in slack season?
- 4—Discussion of "Safety in Delivery Truck Design, Maintenance and Operation."
- 5—Announce date, study assignments, and any special instructions for the next meeting.

### DISCUSSION GUIDE FOR

## "Safety in Delivery Truck Design, Maintenance and Operation"

Your staff may never be called upon to design a delivery truck for either bulk or cylinder delivery, but careful consideration of the material in this assignment may lead to improvements in the equipment or use of your present delivery vehicles. Even more important, the information in the article and the ideas of your delivery drivers on this subject may lead to the selection or design of safer and more efficient vehicles when you replace those now in use.

A study of the catalog material available from the various fabricators of bulk delivery units and cylinder delivery bodies reveals a great variety of designs for both purposes. There must be a market for all of these variations, or they would not be in production in quantities sufficient to justify cataloging.

The differences are generally in four classifications: (1) those that promote efficiency in loading and unloading; (2) those that provide greater safety; (3) those that improve appearance; and (4) those that lower production cost and thus permit the manufacturers to sell at lower competitive prices. All of these factors are important but, generally speaking, the more you have of Group 4, the less you can get of the previous three highly desirable classifications.

Improvement in efficiency and safety features is always desirable. Hence we suggest that the discussion leader encourage "full treatment" of the material in this assignment during the meeting. The

questions presented in the August article cover the skeleton of the problem. They should lead to additional ideas based on the experience of your own men. These ideas should be drawn out, and recorded for their constructive value in improving your present delivery equipment, or leading to the selection or development of more efficient and safer vehicles for your next replacements.

Your experience may not agree in all particulars with that reflected in our article. This doesn't matter. Conditions differ in various parts of the country, and the judgment of human minds differs considerably. In the end, you must rely on your own judgment, and the dictates of your company's bank account. You must do the best you can with the available funds, basing your decision on the widest possible range of experience.

On the subject of maintenance programs and procedure, there is even more divergence of opinion. Yours must be based on your equipment, facilities, operating conditions, and the personalities of your personnel.

We suggest that you review your present maintenance program and practices step by step with the idea of retaining all that cannot be improved, and looking for advisable changes in each step where improvement is possible. And the changes must fit the personal characteristics and capabilities of your operating staff. No changed procedure will work unless the people who follow it want it to work.

upon  
ion."  
le of  
eting  
ating

# 30-SECOND SALES CLINCHERS



**You can sell more gas ranges...quicker...  
easier...by demonstrating advantages of  
ALLTROL® CENTER SIMMER BURNERS**

It's a fact...an interesting demonstration can build up a desire for that beautiful new gas range faster than anything. Shoppers are often callous to conversation...lend dull ears to your finest sales talk, but a pointed 30-second demonstration can open their eyes—and purses! So be sure you have a gas range with Alltrol Center Simmer Burners, connected to gas and ready to show—and sell. A 30-second demonstration can sell more than a thousand words!



**FREE BOOKLET.** Write today for your free copy of "HOW TO SELL MORE GAS RANGES." It illustrates and explains the use of a dozen quick demonstration ideas for getting more sales.

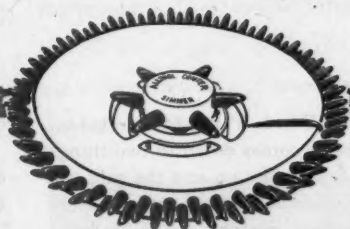
® Trade Mark Reg. U. S. Pat. Office



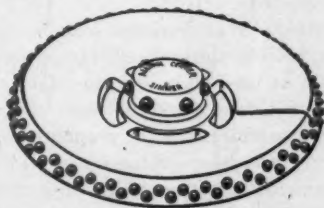
## HARPER-WYMAN COMPANY

Dept. 94B • 8562 Vincennes Avenue • Chicago 20, Illinois

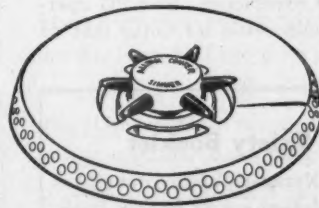
ORIGINATORS OF CENTER SIMMER BURNERS



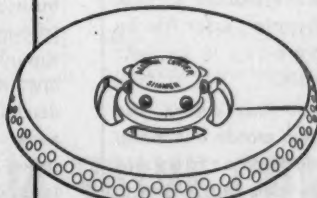
Instant Full Flame...brings foods to cooking temperature in shortest time.



A full range of intermediate heats when wide spread of heat is needed.



"Click"...efficient Center Simmer maintains boiling in any covered utensil.



"Click"...gentle "Keep Warm" heat...keeps foods perfect for serving without further cooking.





# Safety in Installing and Operating Carburetor Systems

By Carl Abell

**S**AFETY in L. P. gas carburetor installations comes down to two things—a safe installation and the safe use of it by the operator. Neither of these two matters presents exceptional problems, but neither should be neglected.

Safety in carburetion installations begins with the tank. No tank should ever be used on any carburetion set-up that does not conform to all the code specifications for propane. The current code specifications of NFPA Pamphlet 58, the ASME, the API-ASME, and the various states have all been carefully worked out as the result of experience. No LPG operator should settle for tanks that do

not comply in every particular.

Tanks do not wear out. But some of the older ones, made to codes which were considered satisfactory in the early days when nearly all LPG motor fuel was butane, are not suitable for propane or the propane mixtures which are in general use today. They not only lack the necessary strength, in some cases they lack essential safety equipment that is now required.

This is not just nonsense or an attempt to sell new tanks that are not needed. Here are some actual occurrences. Last winter a truck equipped with a 1946 motor fuel tank, conforming to the state regulations existing at that time, was backed into a loading dock by an inexperienced driver. The tank struck the corner of the dock; the impact crushed the guard over the valves and knocked off the liquid and vapor outlet valves. Excess flow valves were not required in that state at the time the tank was built, and they had never been added to conform to the current code, although this addition was required by law. Nearly 80 gal. of liquid fuel was discharged in a congested industrial area. Note this: except for the absence of the excess flow valves, this tank conformed in every way with the current code for propane. No used tank should ever be reinstalled without making absolutely sure that it complies with Pamphlet 58 and the regulations of the state, which are not always identical.

Going still farther back into his-

tory, one of our earliest, largest, and most experienced truck operators recently reinstalled some pre-war butane tanks on new trucks, after going carefully over the valves and putting in the necessary checks and excess flow valves, bringing the tanks into complete conformity with the present code requirements for the use of butane. The fuel in the company's supply tanks was watched carefully, and was always butane, so the operation was safe and satisfactory as long as their own fuel supply was used.

One day one of these trucks was away from the home base and had to be filled at a roadside service station. The driver ordered butane, the sign on the pump said it was butane, and the service station attendant said it was butane. Ten miles down the road the pressure relief valve said it was something with a lot more pressure than butane. It happened while going down a long grade, and the escaping fuel ignited from the heat of the brakes or some other source of ignition. The driver escaped, but the truck burned. This was a legal butane tank—100-lb working pressure. The pressure relief valve was right for the tank and suitable for use with butane, but it let go under the pressure of a fuel that should not have been put in a butane tank.

We repeat: in this day and age no motor vehicle tank should be installed or used unless it conforms to the current regulations covering tanks for propane. Then incidents

## Safety Booklet

*The National Safety Council has just released a new 16-page booklet. Titled "What's In It For Me?" it encourages the worker to help himself to a happier, safer life by aiding the company in its fight against accidents.*

*Illustrated in four colors, the booklet uses few words but many thought-stimulating cartoons to put across the idea that there is much to be gained by keeping safe both on and off the job. For sample copies and quantity prices write to National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.*

NEW GLOBE AND ANGLE PROPANE

# Valves give 3 years' NON-LEAKING service

WITHOUT DISC REPLACEMENTS  
OR STUFFING BOX ADJUSTMENTS!



Patent applied for

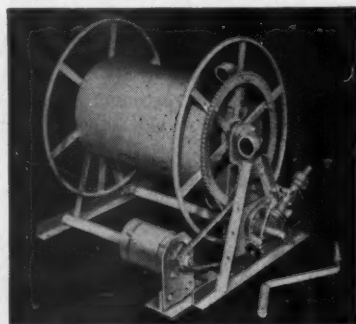
That's the record of these Philadelphia Valve Company valves in everyday operation. Customers are amazed at their years of trouble-free service. That gives them a valid claim to being the finest propane valves ever used by the petroleum industry.

These propane valves will not leak at the stuffing box or anywhere else, due to unique stuffing box design. There is no diaphragm. Eliminating it and using a non-rising stem makes these valves extremely compact—an advantage in close quarters such as a truck tank manhole. Doing away

with the diaphragm also lets the disc lift well up into the bonnet, leaving a clear passage for liquid. And the resilient-type disc seats tight, even when dirt particles are present. The stuffing box seal may be replaced under pressure if necessary.

These globe and angle valves are designed for use in bulk plants, cylinder filling stations, industrial installations and truck tanks. Brass, cast steel and stainless steel models are available in regular or flanged styles. The valves—made in 1", 2", 2½" and 3" pipe sizes—are designed for 400 pounds work-

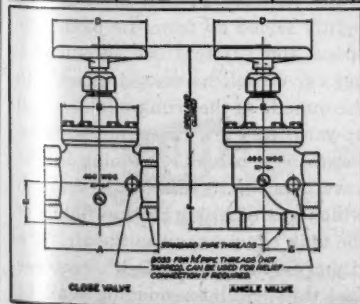
ing pressure. They can be furnished with Teflon or other special discs for use with chemicals and gases such as sulphur dioxide.



PROPANE HOSE REELS

These hose reels, with explosion-proof motors, listed by Underwriter's Laboratories, Inc., are ideal for propane handling. Lightweight and strong—every part of steel, malleable iron or brass. Cast iron is never used. Each has 6 ball bearings with hardened and ground races. The swing joint features uninterrupted passages and self-tightening seal, enabling it to withstand the toughest work loads.

PIPE SIZE	GLOBE VALVES		ANGLE VALVES		DIMENSIONS						
	Code No.	Wt.	Code No.	Wt.	A	B	C	D	E	F	G
1"	A-3665	5.2 lbs.	A-3814	4.8 lbs.	3¾"	2¾"	5"	3¾"	1¾"	1¾"	1¾"
2"	A-3581	14.1 lbs.	A-3761	13.1 lbs.	6"	3¾"	6¼"	4½"	2¾"	2¼"	2¾"
2½"	A-3574	24 lbs.	A-3832	22.3 lbs.	7¼"	4¾"	8¾"	6"	2½"	2¾"	3¾"
3"	A-3471	34 lbs.	A-3833	31.7 lbs.	8"	5½"	9¾"	6¾"	3½"	3¼"	3¾"

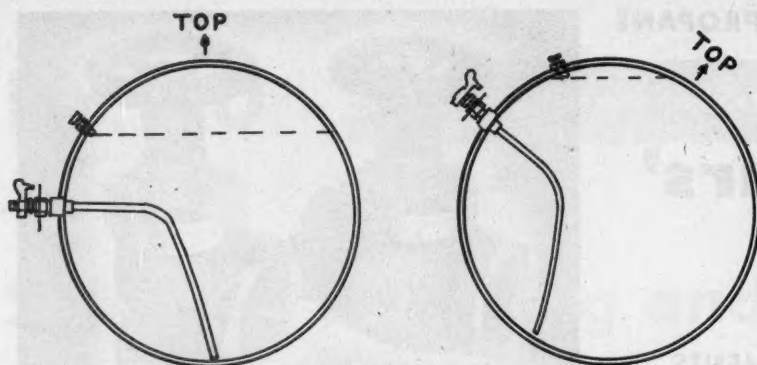


## PHILADELPHIA VALVE COMPANY

ARAMINGO AVENUE AND EAST TIOGA STREET, PHILADELPHIA 34, PA.

Pacific Coast Distributors:

Oil Marketing Equipment Co., 325 Fremont Street, San Francisco 5, California  
Howard Supply Co., 5125 Santa Fe Avenue, Los Angeles 11, California



**Tanks must be mounted** in the position for which they are intended, or the gauges will not read correctly.

like these could not happen. A propane tank will hold butane, but no butane tank is safe when filled with propane or mixture.

Here is another case that was even worse. A mechanically minded farmer converted his own tractor, using a second hand pressure tank that he bought from a local junk yard. It did not have very many holes or fittings, and no manufacturer's plate giving data on strength or the purpose for which it was to be used. It was just the right size and shape, and it could be rigged with enough valves and fittings to get fuel in and out, so he put it on the tractor.

Following his first morning's work the farmer drove the tractor to the supply tank, filled the tractor tank, and went in the house to eat lunch. After the tank had absorbed heat from the engine for a few minutes, it burst with a deafening roar. Fortunately, the fuel did not ignite. After the gas cloud had drifted across the pasture the farmer went out and looked at the tank. It had ruptured at the seam and was spread out almost flat, and the tractor seat was bent down like a wilted lily. What if this had happened while the tractor was in operation, or what if the farmer had stayed around a few minutes to lubricate the chassis? This was a non-code tank, which should never have been used, and it had no pressure relief valve.

Every LPG tank is designed to be mounted in a certain position. This applies to motor vehicle tanks as well as to bulk plant and domestic tanks, and this is the *only* position in which the tank should be mounted. It is particularly important that mobile

tanks shall be mounted on strong supports, and that they shall be anchored securely so they cannot rotate in the mounts. If this rule is not observed, the pressure relief valve may contact liquid instead of vapor. We have no means of knowing how much fuel is in the tank, and the outage valve cannot give a true reading. The outage valve is there so it will be possible to prevent overfilling the tank. If the end of the tube connecting with this valve is high because of improper mounting or rotation, the vapor space may not be adequate, and this brings the risk of escape of liquid fuel through the pressure relief valve in case of expansion due to heat.

The outage valve does not prevent overfilling of the tank; it merely makes it possible for the man filling the tank to know when the fuel has reached the permissible liquid level. Every operator of an LPG engine should understand thoroughly that when liquid appears at the outage valve bleed hole, he should stop filling the tank at once. No exceptions—not even if he is going to put the truck or tractor to work immediately, and thus start lowering the fuel level.

Unless he is properly instructed, the average man will almost always continue filling until the back-pressure stops the pump. He must be made to understand that there is no limit to hydrostatic pressure. As the temperature goes up, liquid fuel is going to expand, and if there is not sufficient room in the tank, it is going to make its own arrangements about more room—out through the pressure relief valve, or out through the

regulator if the lock-off happens to be weak. And under these conditions it is not gas, it is liquid which expands to about 250 times its liquid volume when it hits the air.

The book of rules says that the pressure relief vent must be so located that in case of a discharge the escaping gas shall not impinge on any of the structure of the vehicle. This is a common sense rule that is too frequently overlooked. Let's see what it leads to.

First, trucks. We would not want the escaped gas, if any, to find its way into the engine, or around the brakes or drag chain, or into the cab. The logical thing to do is what International and Reo have done on their factory-equipped trucks. They have put a discharge stack from each tank up the back of the cab, terminating above the level of the cab, and directed upward.

Motor bus regulations likewise require venting up through the roof of the vehicle. Considered in relation to other traffic, this is the only safe solution.

On tractors we do not have the same problem. Venting the relief valve upward should be sufficient. Many tanks used in conversions do not have the pressure relief valve aimed upward; in fact, some have them pointed straight back at the driver. A tractor manufacturer once made this mistake. Shortly thereafter, as the result of occurrences in the field, it was considered advisable to install elbows on all those pressure relief valve outlets, so if any gas did escape it would be directed upward.

Passenger cars and taxicabs offer a special problem. The tank is placed in the trunk. Unless specially sealed between the trunk and the back seat, escaping gas could pass around the seat into the passenger space. City officials in many places where propane-powered taxicabs operate generally require (1) that the trunk be tightly sealed off from the passenger space, and (2) that the pressure relief valve shall be vented directly to the outside of the trunk and directed upward. In a few cities they are also requiring a sizeable opening in the lowest portion of the trunk, through which gas escaping during filling of the tank can pass out to the air. The city of Santa Monica, Calif., requires that this ventilator opening shall be



**BUTLER**  
*Blue Belle*®

helps you  
get more . . .

# BALANCED LOADS



This Blue Belle manifold installation serves a year-around commercial load.

Look at these two important ways that Butler Blue Belle LP Gas systems help you balance summer and winter loads:

1. Blue Belles help you sell more big year-around commercial and industrial loads that need large, manifold installations. With end-fitted Blue Belles, you make manifold installations unmatched for neatness, efficiency and dependability.
2. Blue Belles help you sell more truck and farm tractor loads that require the system tank to be elevated for a liquid pump. Even when elevated for this pump, Blue Belles make low, convenient installations that are easy to service.

Easy-to-reach end fittings make Blue Belles easy to service on any type of installation. This saves your drivers valuable delivery time every day of the year.

Quality-built Blue Belles give your customers dependable service that stimulates the sales of gas and appliances—encouraging users to recommend your gas service to their friends.

Learn how Butler Blue Belles can help you bring summer and winter loads into better balance. Write today for full information.



## BUTLER MANUFACTURING COMPANY

7410 East 13th St., Kansas City 26, Missouri  
910 Sixth Ave., S. E., Minneapolis 14, Minnesota  
Dept. 10, Richmond, California

Manufacturers of Oil Equipment • Steel Buildings • Farm Equipment • Cleaners Equipment • Special Products  
Factories located at Kansas City, Mo. • Galesburg, Ill. • Richmond, Calif. • Birmingham, Ala. • Minneapolis, Minn.

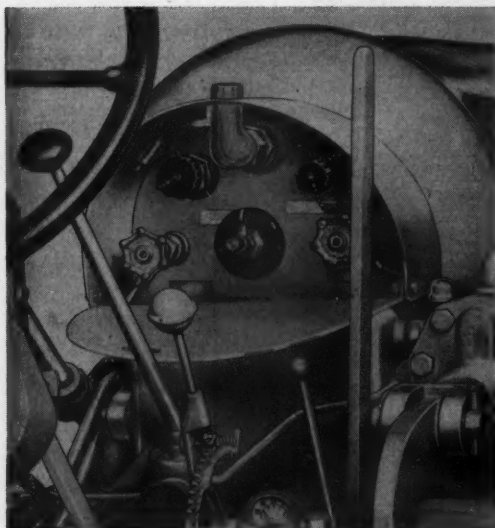
not less than 20 sq in. in area. These are all good ideas to incorporate in any passenger car installation.

Any vent directed upward will collect rain unless it is covered. Water that has run down to the valve may freeze in cold weather. It is almost certain to freeze in case of a discharge. If natural freezing takes place, it renders the valve inoperative, but freezing because of a discharge is likely to hold the valve open, thus causing loss of the entire tank of fuel, instead of closing as soon as the pressure drops to balance the spring tension. This calls for loose fitting rain caps on all pressure relief outlets that are directed upward. These may be hinged, or the separate

a minimum wall thickness of 0.049 in., and shall be adequately protected against exterior corrosion. Copper tubing shall be Type K or L or equivalent, having a minimum wall thickness of 0.032 in. Approved flexible connections (see B.8) may be used between container and regulator, or between regulator and gas-air mixer within the limits of approval by the authorities listed in B.2(a). The use of aluminum piping or tubing is prohibited. In the case of removable containers an approved flexible connection shall be used between the container and the fuel line. (b) All piping shall be installed, braced and supported so as to reduce . . . vibrations, strains or wear."

Most fuel lines are copper tubing. This and other forms of approved seamless tubing may be connected by means of approved tubing fittings designed for use at pressures of 250 psi minimum. This limits the field to the flared type fitting; all forms of slip fitting are out. Particularly, high pressure hose slipped over the tubing and clamped in place is out, although it is quite acceptable on the low pressure side of the regulator. If flexible sections are required in the fuel line to absorb vibration, only the types of flexible metal or hose approved for these pressures and products should be used. These will have threaded connections.

For safe installations copper tubing



**Vents for pressure** relief valves should never point at any portion of the vehicle or the driver.



**A ventilation hole** should be cut in the low point of the trunk floor. It may be covered with wire screen.

slip-off type. If the latter, the only way to be sure that they will not be lost is to chain them to the outlets.

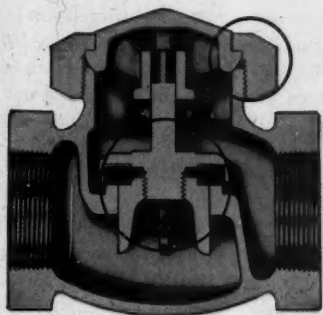
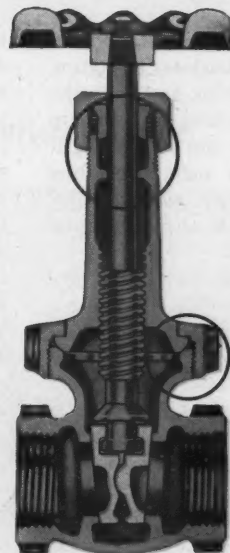
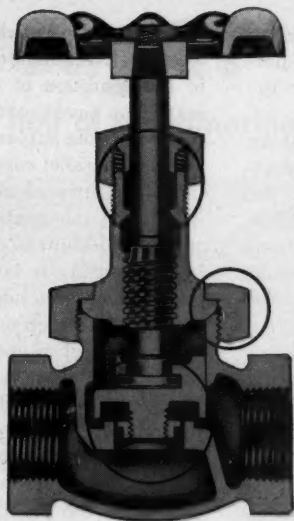
The fuel line between the tank and the regulator is subject to the pressure that exists in the tank. Obviously, there should be no weaknesses. Three-eighths inch copper tubing is the most commonly used material for fuel lines, but it is not always the best. Pamphlet 58 gives us a choice of materials which can be used. Division IV, Section 4.5; piping, tubing and fittings says, "(a) All piping from fuel container to first stage regulator shall be iron or steel (black or galvanized), brass or copper pipe; or seamless copper, brass or steel tubing. Steel pipe or tubing shall have

The authorities listed in B.2(a) are Underwriters' Laboratories Inc., a nationally recognized testing laboratory, or the authority having jurisdiction.

Since this is the high pressure fuel line, subject to pressures which may exceed 200 psi, it is quite important that it shall not pull apart at the joints. Iron, steel or brass pipe may be threaded. Under some conditions it may be desirable to solder or braze the joints. The codes require that this be done with material having a melting point exceeding 1000° F. As a matter of common sense, no butted joints should be soldered or brazed. This process should only be used on sleeve type joints.

must be soft. Used tubing should be avoided if possible, as the inside is likely to be coated with oxide, which will give operating trouble if it gets in the regulator valves. Any tubing, new or used, will become hardened from vibration or excessive bending. Hardened tubing may crack at the bends or flares, so if there is any indication of hardening the tube should be softened before using. This may be done by heating it red hot, and plunging it into cold water—just the opposite of steel, which is hardened by this treatment.

To insure perfect joints in copper tubing, the flares should be made with a good flaring tool, after first cutting the tube cleanly with a cut-



#### GATES - GLOBES - ANGLES - CHECKS

Special synthetic packing in the amply proportioned stuffing box provides an absolute seal and reduces stem friction. Best packing there is for volatile fluids!

Line-contact, body-bonnet joint is designed for a leakproof seal by mating the spherical seat on the bonnet with an angular seat on the valve body.

Renewable synthetic discs on globe and angle valves are long wearing... and resilient for positive closure. Slip-on-type disc holders have adequate guiding to assure accurate seating.

## ... valves for positive control of L-P Gas!

All OIC Valves for L-P Gas service are Underwriter approved. They are recommended for volatile fluids, light oils, hot or cold water and air.

Valve bodies are sound, cast of A. S. T. M.—B61, steam bronze and fitted with heavy, union-type, body-bonnet connections for long leakproof service.

Stems are accurately machined of OIC 40 Alloy (an aluminum-silicon-bronze which won't gall or seize).

For complete information on sizes ( $\frac{1}{4}$ " to 3"), pressures (400 lbs. WOG, non-shock) and prices, write for the OIC L-P Gas Folder, Form 802 or contact your local OIC Distributor.

THE OHIO INJECTOR COMPANY • WADSWORTH, OHIO



# VALVES

BRONZE & IRON, FORGED & CAST STEEL,  
LUBRICATED PLUG VALVES



ter, and removing any burrs with a reamer. The old business of cutting the tube with a hack saw with the blade reversed, starting the flare with the tang of a file, and completing it by drawing it up under the fitting nut may be all right with gasoline, but it is definitely hazardous in making up LPG joints.

The fuel line should be run in a protected location where it will not be flattened or broken by mechanical impact. Whenever a section of fuel line is damaged in any way it should be replaced. It is not necessary to replace an entire fuel line to eliminate one small damaged section. The section may be cut and a new section installed by means of flared fittings—never by soldering, brazing, or a friction joint of any kind.

Wherever possible a copper fuel line should be protected by covering it with electrician's loom if in a sheltered location, and flexible or solid metal conduit where it is exposed to any possible source of mechanical damage. At least every 2 ft the fuel line should be anchored to protect it from vibration, which might eventually result in crystallizing the metal and causing breakage.

When passing the fuel line through a hole in a cross member, the tube should be anchored, if possible, where it will not be in contact with the edge of the hole. If this is not possible, the fuel line should be thoroughly protected against abrasion. The same precaution should be taken in bringing the line around a corner or over an obstruction. In bringing the line up from the frame to the regulator, it should be located where

there is the least possible chance of damaging it in the course of the normal service operations under the hood.

The regulations all say that there shall be no piping or tubing conducting LPG under high pressure in the cab or passenger compartment. While it does not happen often, conditions might arise some day that would cause a tube to leak. We do not ever want fuel leaking directly into enclosed spaces occupied by people.

When the fuel line installation is complete, all joints and connections should be tested with soapy water to prove that there are no leaks. Likewise, if leaks are suspected in the fuel line of an outfit that has been in service, the testing should be done with soapy water. Never use a match or open flame.

If any spot along a fuel line should be coated with frost, or cold to the touch, it indicates either a leak or an obstruction that permits only a small amount of fuel to pass. In clearing these obstructions never attempt to straighten out a crushed tube. Cut out the damaged section and replace it with a new piece of tubing, using flared fittings to connect with the old tube.

A fuel filter should always be included in the installation, not only to prevent operating trouble from the lodging of solid impurities under the regulator valve seats, but also to prevent the escape of fuel due to an impaired seat when the engine is not running.

As a second precaution most experienced men install an electric lock-off which is interconnected with

the ignition switch so the fuel is locked off automatically regardless of the condition of regulator valve seats. You have heard about the man who wore both suspenders and a belt. This is a parallel case.

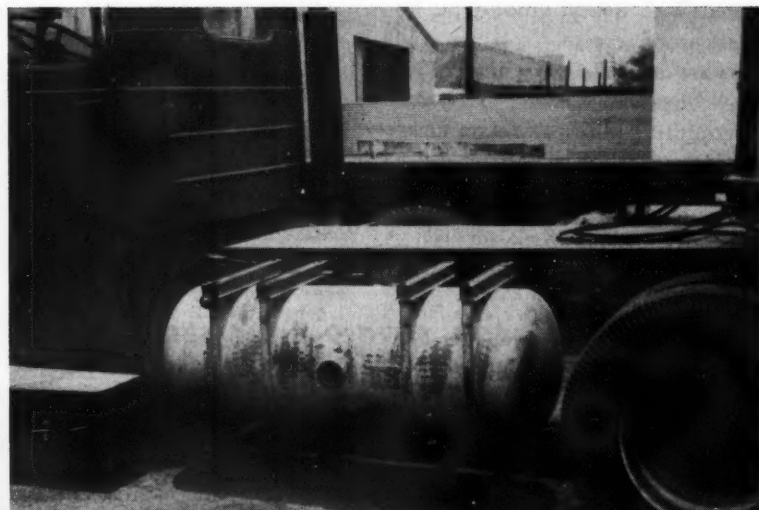
The practice of operating an air horn from the pressure in the fuel tank is widespread. In most states this is contrary to law. Most offenders justify their action with the statement that it would not be possible to release enough propane through the horn to create a hazard while traveling on the road; the dispersion would be complete and automatic. This is probably true 999 times out of 1000 while traveling on the road. The objection to the practice comes from the possibility that the horn may be blown while the vehicle is in a garage, or someone may sound it while standing on the street or in a yard just to distract a person smoking a cigarette directly in front of the horn. A blast of flammable mixture in his face will upset almost any smoker, but the practice is not recommended.

In installations which do not include an electric fuel lock-off it is a good safety practice to turn off the fuel at the tank when the engine is to be inoperative overnight or for a period longer than a few hours. When shutting an engine down for a prolonged period, it is a good idea to close all fuel valves regardless of the equipment.

In performing maintenance work on engines equipped with LPG, or on the regulator or filter, it is sometimes necessary to evacuate the contents of the regulator and the fuel line. If the engine will run this can be safely accomplished by turning off the fuel at the tank and running the engine until it dies. If this is not possible, or if the job of the moment consists of back-flushing the filter to get rid of the solid impurities on the filter element, the fuel must be allowed to escape. This should never be done inside a building, nor where the escaped gas may drift into a building. Instead, take the vehicle out in the open where the breeze will carry the gas across a considerable distance where it will encounter neither people nor any possible source of ignition.

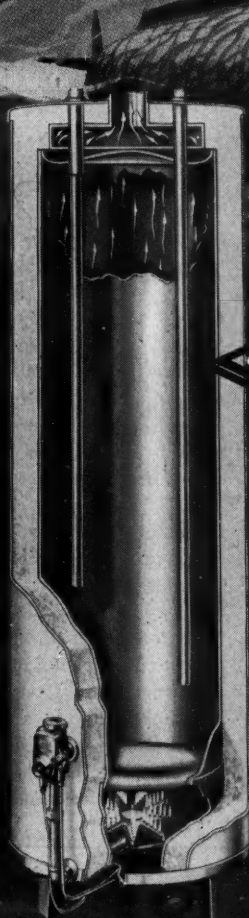
Mobile tanks are sometimes removed and kept on the lot of placed in storage. As a precaution against

**Truck tank valves** may be mounted next to the frame for greater protection against mechanical damage.



**tough!**

as the hull of a submarine... smooth as a periscope lens



**UTILITY'S NEW**

*dual-lined*  
**armor-glas**

**automatic gas  
water heaters**

New ARMOR-GLAS Water Heater... Utility's answer to the demand for a water heater with glass lining that assures years of extra tank life... that fuses with steel in a perfect bond! Not one, but TWO layers of tough, smooth ARMOR-GLAS give absolute protection against corrosive effects of water.

There's extra PROFIT for you when you tell your customers about the extra VALUE, extra FEATURES of Utility ARMOR-GLAS Water Heaters. Available in 30 and 40 gallon sizes.

WATERS & SUTHER  
AND OCCIDENTAL  
AUTOMATIC GAS RANGES  
UTILITY  
FURNACES  
AIR COOLERS  
WATER HEATERS



For further information, see your Utility Water Heater  
Jobber or Distributor—or write:

**UTILITY APPLIANCE CORP.**  
4851 South Alameda Street  
Los Angeles 58, California





**Substantial steel carriers should be provided for ICC tanks used in tractor installations.**

creation of a hazard by some uninformed person opening a fuel valve, these tanks should always be emptied in a safe place. If there is no blow-down stack or evacuator available and there is more than a very small amount of fuel to be dispersed, the tank should be taken to an open field where there is no possibility of ignition before the dispersal is complete. All valves should be closed after the pressure is exhausted, and should be left closed during the period of storage to prevent the tank from breathing air and accumulating moisture.

Tractor installations are frequently made by the use of a vapor withdrawal carburetion system, using ICC cylinders for tanks. There are a few standard safety precautions to observe. The cylinder must be carried on a substantial support, capable of withstanding a force equal to four times the filled weight of the cylinder from any direction. This is the same rule that applies to the mounting of

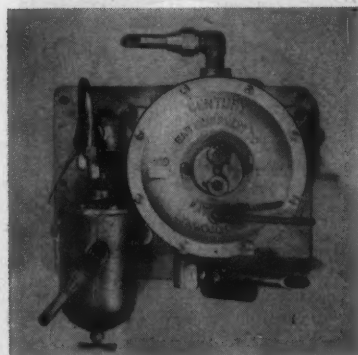
permanent tanks. If the standard house cylinder is used, it must be mounted in the vertical position, or the fuel system will draw liquid instead of vapor, which could be bad.

If the tank is to be mounted horizontally the fuel valve must be fitted with a bent tube which will reach up into the vapor space. Exchange cylinders must be fitted with similar tubes with the bend in the same relation to the fuel outlet, so by mounting with the outlet connection in the same position the operator may be sure that the carburetor will draw vapor instead of liquid. These horizontal mounts are not satisfactory on tractors used anywhere except on level ground, as operation on a slope is likely to submerge the fuel tube.

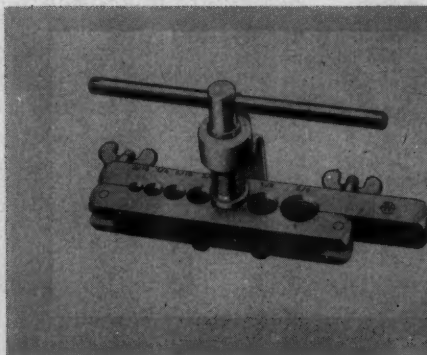
The primary regulator of the vapor withdrawal system should be mounted at the fuel outlet of the tank. Pamphlet 58 (Section 4.5(a)) calls for an approved flexible connection between the fuel container and the fuel line.

This may be either a flexible metal section or a fuel-proof hose, with suitable fittings to connect into the line. While this portion of the line will ordinarily carry only the normal outlet pressure of the primary regulator, it will be subject to the full tank pressure if the regulator valve should leak. It is therefore recommended that the connections on the flexible section should be the threaded type instead of the clamped or friction type. The fuel valve should be kept closed when the tractor is not in use.

LPG is a safer fuel than gasoline for motor vehicle operation if the system is properly installed. Particularly it is safer in a wreck, because the fuel system is completely closed and the strong steel tank will withstand almost any impact without rupturing. This can certainly not be said of gasoline tanks. The percentage of fires in gasoline cars following collisions or upsets is painfully high. With LPG this is almost impossible.



**An electric fuel lock should be included in the high pressure fuel line of the liquid withdrawal system.**



**Use only flared fittings for high pressure fuel lines, and make the flares with good cutters and flaring tools. The old business of using a hack saw and starting the flare with a file is definitely hazardous.**





# HICKORY-Q

## REVOLUTIONARY New Cooking Machine!

# SELLS ITSELF!

To Restaurants, Drive-ins, Butcher Shops, Hotels, Markets, Taverns, Motels, Club Houses

## COMPLETELY AUTOMATIC!



**FOR COMMERCIAL USE ONLY**

**GAS  
FIRED**

### SILENT SALESMAN

The HICKORY-Q has full-size heat-treated glass door. Interior frontal lighting shows off meats in beautiful pinks, reds, and brown. The meat aroma combined with the natural hickory smoke are irresistible. These factors will skyrocket sales.



## Set it—Forget it!

### COOKS 300 POUNDS PER DAY!

Place meat on spits, pour in sauce, insert HICKORY-Q Smoke Cartridge, turn on switch, and set Time-O-Stat — that's all! Basting, smoking, and cooking are automatic and labor-saving.

### HICKORY-Q Smoked "Sauce-Basted" Meats

The revolutionary new HICKORY-Q roasts, hickory smokes, and bastes meat in about half the ordinary time. Moisture is held in to reduce shrinkage to as little as 19%. HICKORY-Q cooks beef, pork, chickens, or any other meat! Remember, set the HICKORY-Q and forget it!

### CONTINUOUS PROFITS FOR YOU!

Make profits from the sale of both the HICKORY-Q machine and the fast-moving HICKORY-Q Warmer plus, the Smoke Cartridge.

### "ACTION-PACKED" PROMOTION

Advertising in Restaurant Management, Restaurant Management's Show Daily, Restaurant South, and other publications will sell the HICKORY-Q line for you!

Component Parts Engineered and Furnished by America's foremost manufacturers.



### HICKORY-Q WARMER

A sales builder — lets customers see and select food! Moves on casters. Gas fired. Permaglas sides.

## BE A HICKORY-Q DEALER!

### HUNT HEATER CORPORATION

220-BP Twelfth Avenue, North, Nashville, Tenn.

Please send me complete information and dealer prices on the HICKORY-Q line.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

## Questions for Discussion at Twentieth Safety Meeting

The problems of safe installation of LPG carburetion systems are more closely related to those of domestic or industrial applications than would appear to the casual observer. When we stop emphasizing differences and look for similarities, we find that the fuel system for carburetion is a miniature tank of the domestic bulk type, equipped with valves for both liquid and vapor withdrawal, and arranged to be mounted in a certain position so the gauges will give true indications, and so the pressure relief valve will communicate with vapor instead of liquid. With this in mind, the differences are merely details.

The regulations governing installation of tanks and fuel lines, and the recommendations covering the mounting and connections of regulators and carburetors are merely the result of common sense and experience. They tell us how and where the tank should be mounted, what safety precautions should be exercised in relation to traffic and highway conditions, and in short how the fuel system should be protected from the road hazards and other special conditions to which such installations will be exposed. They also tell us how to protect people and property against hazards that may develop in case any fuel should escape due to accidental or natural causes.

As is the case in non-mobile storage installations, carburetion jobs involve both remembering and thinking. The following questions are designed to exercise both those faculties.

---

### QUESTIONS

1—What should be the working pressure of a mobile tank for L. P. gas?

2—What three things should be determined about a used tank before installing it on a motor vehicle or tractor?

3—Why is it never safe to use a non-code tank?

4—What three things could be wrong if a mobile tank were not mounted in the position for which it was intended?

5—What hazard is introduced in filling a tank above the indicated maximum liquid level? What should you do if a customer asked you to "pack" his tank (fill it completely with liquid)? Does your insurance coverage become void if you overfill customer tanks?

6—What two provisions for venting and ventilation should be provided in a taxicab installation? Would you consider the same desirable in a private passenger car installation?

7—Would you consider the presence of the

"works" of a two-way radio in the trunk of an LPG-equipped taxi a hazard? Why?

8—How would you install the fuel line for an oil well drilling operation in Wyoming, where an access road crosses the space between the storage tank and the engines?

9—If a tractor tank has the pressure relief valve pointed straight back, how would you prevent any possible discharge from striking the driver?

10—What steps should be taken in preparing an LPG tractor fuel system for winter lay-up?

11—How would you make a mobile tank that has been removed from a vehicle safe for prolonged storage?

12—Why should the primary regulator of a vapor withdrawal system be located at the tank, while liquid withdrawal regulators are located at the engine?

13—Why should we use only threaded fittings on the vapor withdrawal system fuel line between the primary and secondary regulators?



# ...Regulation

This unit has been designed to pass the right amount of gas at the right pressure. Appliances, once adjusted, stay adjusted. There are no freeze-ups. Not even slow downs. Customers stay happy. You'll be happy with larger profits, due to fewer service calls.



DELTA MAN MANUFACTURING CO. INC.

BATON ROUGE, LA. • MACON, GA. • BEARDSTOWN, ILL.

EXPORT OFFICE: INTERNATIONAL TRADE MART, NEW ORLEANS, LA.  
MANUFACTURERS OF PRESSURE VESSELS AND OIL FIELD EQUIPMENT



# Answers to August Safety Questions

Questions for Safety Article No. 19, "Safety in Delivery Truck Design, Maintenance and Operation," appeared in the August issue on Page 68. Here are the answers.

1 — Take it easy wherever the roadway is rough, and remember that in an overloaded truck the brakes are overloaded. Hold speed down so brakes will always stop in time. Allow extra room for stopping when following another vehicle.

2 — If the front axle is overloaded, the truck steers hard and increases driver fatigue. If load is too heavy behind rear axle the front end will tend to rise, so the front wheels may lose steering traction.

3 — Most frequent causes of broken frames are using too light a chassis for the load, and anchoring tank tight on frame at four points, which concentrates frame torsion stresses at front of tank. Cure for the first condition is to buy a truck strong enough to carry the load. Second condition, devise flexible mounting so frame torsion may be distributed along entire frame rail.

4 — That depends on how your truck is constructed. If the pump is mounted on the truck frame, inserting a section of flexible tubing between the tank and the pump will generally cure the trouble.

5 — The piping should have larger capacity than the excess flow valve, or the latter can not function. It might as well not be there if installed with choked down piping.

6 — Size of piping makes no difference with the self-closing spring loaded valve, which remains closed unless it is opened by the operator. Controls should extend to the driver's position when con-

trolling fuel delivery. They will not be left open if arranged so the truck can not be made ready to travel until they are closed.

7 — Any cabinet containing fuel pipes, hoses, transfer pump or meter should be ventilated, with a large hole in the cabinet floor at the lowest level.

8 — Only you can answer this question.

9 — Flatbeds are easier to load if cylinder storage is on platform at truckbed height, which it should be. But the driver has to do more climbing in and out of the truck bed, and it is more work to lower cylinders to the ground unless the truck is equipped with an endgate elevator. Low side mounts are easier to unload, but generally require extra time and effort to load.

10 — It depends on climatic conditions. Diamond tread steel plate is generally preferred where rain or snow are frequent. Many operators prefer plywood flooring in dry climates.

11 — Do you? You should.

12 — That's your problem also. Generally speaking, the larger the organization, the more necessary this supervision becomes.

13 — Unless your truck fuel tank was manufactured in your own state quite recently, or was installed by the manufacturer of the truck, you should make sure that it is legal.



DESIGN...

*performance...*



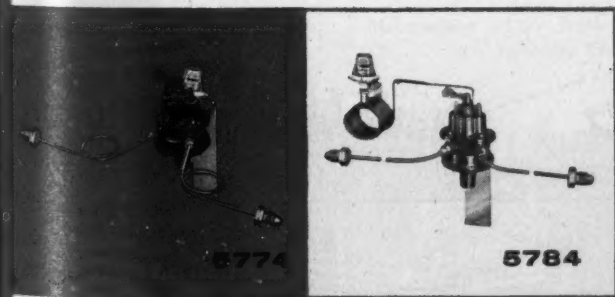
# REGO<sup>®</sup>

## SERVICE AND RESERVE INDICATOR

REGO presents for use with automatic throwover manifolds a new Service and Reserve Indicator which has no equal. A design as simple and foolproof as this has never before been offered to the LP Gas industry. Rugged and weatherproof, this new indicator will not clog with insects... provides visibility from *any* direction... gives positive indication through diaphragm type mechanism... will not bind in operation... non-corrosive elements. For both direct and remote installation.

*The* **BASTIAN-BLESSING** *Company*

4201 WEST PETERSON AVENUE, CHICAGO 30, ILLINOIS



REGO is the registered trade mark  
of The Bastian-Blessing Company.

Pioneer and Leader in the Design and Manufacture of Precision Equipment for Using and Controlling LP Gases

**"A budget . . . is a coordinated financial plan for operating an enterprise efficiently. It is meant to be a dynamic thing. Those business heads who think of a budget as a static tool . . . are wasting time, money and energy."**

**By Irving Elbaum**  
Certified Public Accountant

**M**OST owners and managers of smaller businesses realize the importance of studying the results of their operations. Fewer, unfortunately, realize the importance of looking ahead with a view toward knowing what their financial picture might be in the near future.

Knowing what financially might be is extremely important, perhaps more so nowadays than in the recent past. Those who operate businesses by hit-and-miss methods come to the end of the economic road, some sooner, some later, but inevitably. It is invaluable to have a reasonably good idea of these items during the coming six months: sales, purchases, wages, and uncontrollable overhead. Who would doubt that many important decisions could be made if the head(s) of a business unit were reasonably certain what the cash, inventory, receivable, payable, and income tax positions would be three months, six months, or even a year from the discussion date? It is a boon to the harried administrator to keep to an irreducible minimum the erosion of his bank account.

The mechanism we use to achieve our objective is the budget. We are all aware of this bugaboo. Usually the two basic reasons for a budget's becoming an instrument of destruction, rather than instruction, are (1) wrong, or inadequate, techniques in budget preparation and budget analysis, and (2) incorrect concepts regarding budgets.

*This is Part 4 in a series of articles about efficiency in business.*

These two reasons are in many cases parts of a vicious cycle. However, the determination of cause and effect is not as vital at this time as the submission of some simple truths in connection with the budget bugaboo.

A budget, first of all, is a coordinated financial plan for operating an enterprise efficiently, be it commercial, non-profit or domestic. Secondly, it is meant to be a dynamic thing. It, like most things in this world, changes.

Unfortunately, many businessmen think of a budget as an economic strait jacket. It is anything but that. Those business heads who conceive of a budget as a static tool (and some businesses have used the same

budgeted figures for five or more years) are wasting time, money and energy.

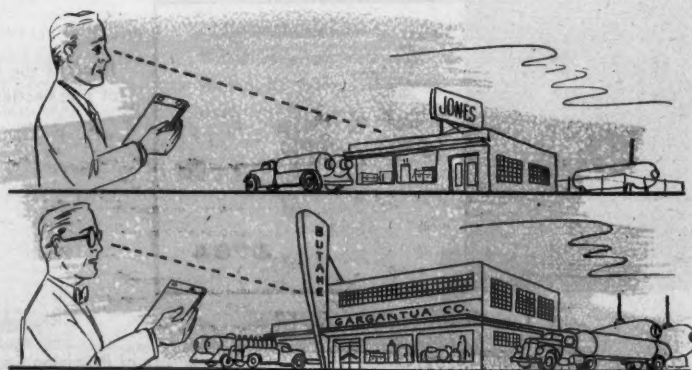
How does one set up a budget? The basic step is for the head (or heads, in the larger businesses) of the organization to estimate the sales volume for a definite period, let us say one year. With this starting point the estimated purchases, inventory and wages necessary to maintain the sales volumes are computed.

The next logical step is to determine what expenses will be needed for the estimated sales volume. Naturally, the tie-in between the mentioned items is extremely important. For example, if three employees are necessary to maintain a sales volume for the year in the amount of \$50,000, it would be obvious incorrect to estimate the wages at \$4000, since it is impossible to have three full-time workers for that sum.



# THE BUDGET

## *Instrument of Destruction or Vital Tool?*

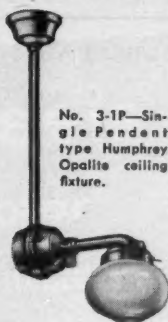


Some business managers choose to look on the budget as a goal of what will be; others think of it as a goal of what should be.

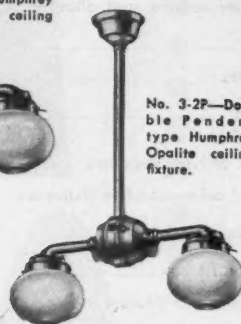




No. 3 Humphrey Opalite for sidewall mounting. Particularly convenient where ceilings are low. Globe easily removed for cleaning.



No. 3-1P—Single Pendant type Humphrey Opalite ceiling fixture.



No. 3-2P—Double Pendant type Humphrey Opalite ceiling fixture.



## Humphrey Opalites

Handsome mantle type lamps with opal or half-frosted globes—provide a flood of soft, white light. Each mantle equal to 50-watt electric bulb. Very economical to operate. Three styles, as pictured. Ideal for trailer homes, vacation cottages, emergency farm lighting, fishing and hunting lodges.



# Humphrey Lighting and Heating Equipment Helps Make MORE and HAPPIER Bottle Gas Customers

Humphrey lighting and heating equipment for LP Gas is one of today's truly fine lines—distinguished in appearance and superbly made. Show this equipment to customers who have been using Bottle Gas for cooking or water heat-

ing only. You'll find that the Humphrey line will help you make multiple users of your present customers—help you get new customers, too. Let us give you the facts. Write for catalog today.

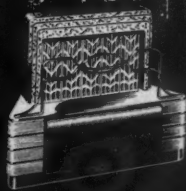
## GENERAL GAS LIGHT COMPANY

KALAMAZOO, MICHIGAN

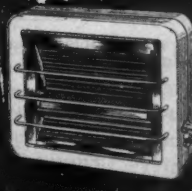
Manufacturers of Gas Heating and Lighting Equipment  
for More Than 50 Years



GAS UNIT HEATERS



RADIANTFIRES



WALL HEATERS



CIRCULATORS

### BUDGET No. 1

	Budget	Actual	Over Estimate	Under Estimate
Gross sales .....	\$35,000	\$37,000		\$2,000
Less: Sales returns and allowances .....	350	1,000		650
Net sales .....	34,650	36,000		1,350
Cost of sales .....	20,790	24,000		3,210
Gross profit .....	13,860	12,000	\$1,860	
Selling and delivery expenses .....	4,000	5,000		1,000
General and administrative expenses..	1,500	1,200	300	
Total operating expenses .....	5,500	6,200		700
Operating profit .....	8,360	5,800	2,560	
Add: Dividend and interest income ....	200	200		
Net profit for the period .....	\$ 8,560	\$ 6,000	\$2,560	

A complete profit and loss type budget. Budgeted figures are compared with actual results and differences are shown as over- or underestimates.

The budget (and this is mandatory) should be revised at stated intervals or when business conditions change appreciably. This financial plan which we call the budget is actually a goal. Some business managers choose to look on it as a goal of what *should be*; others think of the budget as a goal of what *will be*. Sales-minded people usually fall in the latter category. In point of fact it isn't too important which goal one chooses. Some businesses choose both goals, but set up separate budgets. The significant thought to come away with is this: know whether you have a "should be" budget or a "will be" budget.

The basic step in budget preparation involves a sales estimate. Other estimates are made from this. Specifically, though, where does one go to obtain those data? Or, as some people think, are they really wild guesses? Not at all. Your books of account, government business publications, general and trade periodicals, talks with your suppliers and their salesmen, chats with your accountant, insurance advisor and attorney—all of these contribute to your store of information.

Further, conditions in your trade and in your own business unit give you first-hand data that are invaluable in planning estimates. Your own salesmen are excellent sources of information. In the final analysis, of course, your estimate represents the distillation of other estimates.

Budgets are of two types in the

commercial world: profit and loss budgets and balance sheet budgets. Complete or partial budgets can be prepared for each group. Examples of partial budgets are sales (indicating estimates by product, or territory, or department, or salesmen), cash (showing estimate of cash position), operating expenses groupings, such as selling and delivery expenses (showing the estimate of each expense item).

Regardless of the type of budget, it is important to measure the budgeted figures against the actual results in order to determine the variations and the possible reasons for those variations.

Two examples of simple budgets are presented. No. 1 is a complete profit and loss type; No. 2 is a partial profit and loss type—the selling and delivery expenses section. In each case it will be noted that budgeted figures are compared with the actual results for the period under consid-

eration and differences are shown as overestimates (where the budgeted figure exceeds the actual figure) or underestimates. Nomenclature varies but most business heads prefer those words.

In both budget examples the figures in the *actual* columns were taken from the profit and loss statement of article No. 3 in this series. The figures in the *overestimate* and *underestimate* columns are arrived at horizontally for each line. For example, the gross profit overestimate (budget No. 1) of \$1860 is computed by deducting the \$12,000 actual figure from the \$13,860 budgeted figure. As a result of using this logical method it will be found that some figures (this \$1860 overestimate is an example) cannot be arrived at by a first-glance vertical appraisal. However, after a moment's study it will be seen that each figure does make sense.

The \$1860 overestimate of the gross profit resulted from an underestimate of \$3210 of the cost of sales less an underestimate of \$1350 of the net sales. All substantial differences should be examined and analyzed. It does not matter whether the difference is a "good" one (where, for example, we overestimated a given expense) or a "bad" one. The important thing is that if a good size variation exists between the budgeted and actual figures it should be scrutinized.

In budget No. 1 for our purposes it was estimated that the sales returns and allowances would be 1% of the gross sales and that the gross profit would be 40% of the net sales. The following sections were abbreviated: cost of sales, selling and delivery expenses, general and administrative expenses. In actual practice

### BUDGET No. 2

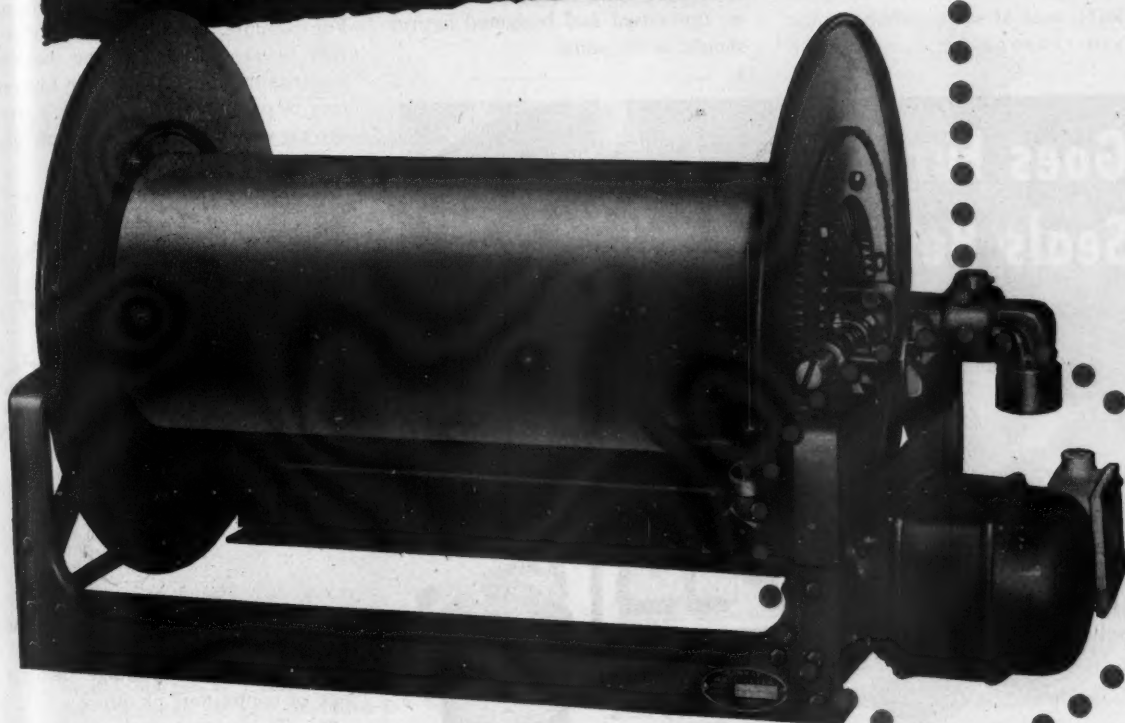
Selling and Delivery Expenses:	Budget	Actual	Over Estimate	Under Estimate
Sales salaries .....	\$ 2,000	\$ 3,000		\$1,000
Advertising .....	900	700	\$ 200	
Sales promotion .....	400	600		200
Truck upkeep .....	350	300	50	
Depreciation — truck .....	200	200		
Provision for bad debts .....	150	200		50
Totals .....	\$ 4,000	\$ 5,000		\$1,000

The selling and delivery expenses section of a partial profit and loss type budget. Variations between budgeted and actual figures can be shown in statements, graphs or essay form.

# Hannay Hose Reels

with Explosion-Proof Motor

SAFE • EFFICIENT • Completely DEPENDABLE



## The one Hose Reel that has set **NEW** standards in *Efficiency, Economy and SAFETY* . . .

The Hannay Hose Reel is scientifically designed and constructed to meet today's most exacting requirements. Users of Hannay Hose Reels . . . and they include many leading LPG distributors . . . will tell you that THIS reel does a REAL job, winter and summer; reduces hazards, lengthens hose life tremendously, speeds up deliveries, eliminates mess and annoyance. Before you say "It can't be done," ask men who KNOW about Hannay performance.

Explosion-proof model has heavy-duty electric motor integral with reel. Built for long life without maintenance or part replacement, this motor is connected through conduit for sealed, safe installation, with explosion-proof switch and vapor-proof junction box. Permanently lubricated sealed ball bearings. Operates on low current at safe, controlled, uniform speed. Quiet, positive sprocket and chain drive eliminates clutch and gear shifting. Simplicity of construction and operation keeps maintenance at absolute minimum. Rolled disc edges and tubular take-off rollers prevent scuffing and hose damage. Sturdy, compact, durable, dependable!

GREATEST NAME **HANNAY** HOSE REELS IN HOSE REELS



MANUAL & POWER OPERATED HOSE REELS FOR EVERY REQUIREMENT

©1954 C.B.H.&S., Inc.



separate schedules (such as budget No. 2) would be submitted in connection with No. 1 or the details of each section might be listed below the group heading. The latter method is somewhat unwieldy, particularly in the case of a larger firm.

The variations to be analyzed are gross sales (any special reason(s) for the underestimate?), sales returns and allowances (why is actual percentage almost three, when budgeted figure called for 1% or gross sales?), cost of sales (what are the main reasons for actual's being

66% and budget's being 60% of net sales?), selling and delivery expenses (details of which are shown in No. 2).

In budget No. 2 it will be noted that *Depreciation—truck* shows no variation. This is due to the fact that depreciation is a bookkeeping entry and, as such, is an estimate in much the same way that a budgeted figure is an estimate. Consequently, if no new trucks were acquired and no old ones were sold, scrapped or traded in, the actual and budgeted figures should be the same.

The underestimate of sales salaries is rather serious, since the actual figure is 50% greater than the budgeted one. Since the sales volume didn't increase proportionately (and reference to the first line in No. 1 shows that the gross sales variation was \$2000 over a budgeted amount of \$35,000) this expense would seem to be a fertile field for further scrutiny.

The periodicity of budget preparation varies not only from company to company but even within one firm. For example, a profit and loss budget may be projected for three months whereas the same firm's cash budget may be projected for one year. There are no set rules since there are too

**Goes Further....  
Seals Better....**



**PLS\***

For your convenience:  
available in handy  
1-lb. brush top cans.

"John Crane" \*Plastic Lead Seal is the most economical all-purpose sealing compound for pipe joints, studs and gaskets—because you use less to get a better seal. PLS seals for the life of the connection, yet never hardens, allowing joints to be easily broken after years of service.

PLS prevents galling . . . is insoluble in water, gas, steam, many chemicals and all petroleum products. Use it for all services . . . low or high pressure applications up to 6000 psi. . . . temperatures to 500°F. Carries the Underwriters' seal of approval. Approved by Louisiana Butane Propane Institute.

**Prove to yourself that it takes less PLS to give a perfect seal.  
Send for a generous free sample.**

**Crane Packing Company,  
1838 Cuyler Avenue, Chicago 13, Illinois.**

In Canada: Crane Packing Co., Ltd., 617 Parkdale Ave., N., Hamilton, Ont.

**JOHN CRANE CRANE PACKING COMPANY**



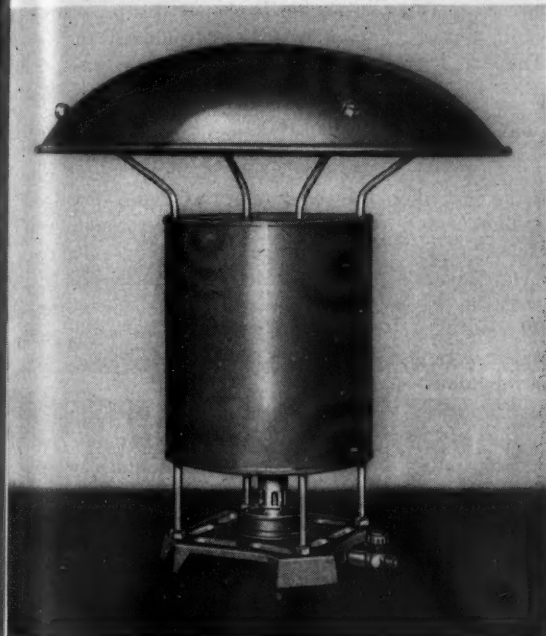
many variables to be considered. Generally speaking, the argument for short-term budgets is more accuracy, the offsetting disadvantage being a lack of continuous planning.

The variations between budgeted and actual figures can be shown in statements such as budgets 1 and 2, graphs or essay form. The first two methods are preferable, since they tend to highlight the variations. In some budgets attention is focused on the wider variations (between budgeted and actual figures) by special techniques: asterisks, colors, special columns, and footnotes.

The budget is a most valuable tool of management. It makes use of the past and present to evaluate the future. When the future becomes the past invaluable data may be gathered by comparing the budgeted and actual results. It is important to recognize that budget preparation and analysis are fairly technical processes and should be undertaken with extreme care and by people who are willing to devote sufficient time to this vital tool.

BUTANE-PROPANE News

# The **NEW** Weldit L-P Portable HEATERAMA SALAMANDERS



**NO. 800** Weldit Salamander, Floor type model. Height 22", Width 19", Weight 13 lbs. Operates off any Standard L-P Tank.



**NO. 850** Weldit Salamander Tank Top Model. Height 20", Width 19", Weight 14 lbs. Operates off any L-P Tank equipped with Tank Top Valve.

New design, new efficiency and new economy is yours now with the Weldit L-P Heaterama Salamander.

This Weldit Heater is the end result of over two years experimental work by Weldit Engineers. It is designed to give maximum high heat output at low cost, requires no priming or pumping, positive control, no smoke or soot, generates heat fast, portable, rugged construction assures long life, fabricated of steel and cast iron. Priced right.

Write for free folder today.

**Weldit**  
INC.  
SINCE 1918



**Free!**

**990 OAKMAN BOULEVARD,  
DETROIT 38, MICHIGAN**

**WELDIT, INC., 990 Oakman Blvd., Detroit 38, Michigan**

Gentlemen: Please mail me your new folder on the new Weldit Heaterama Salamanders and your L-P Equipment.

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

CANADIAN DISTRIBUTORS—ALLOY METAL SALES—881 Bay St., Toronto 5, Ontario, Canada

## SOUTHERN TECH.

### Fits Men for Gas Industry Futures

**I**N recent years the L. P. gas industry has needed many more trained technicians than are available. In 1949, to meet this demand, the Gas Fuel Technology department of Southern Technical Institute, Chamblee, Ga., was organized.

A national advisory committee was appointed by the Liquefied Petroleum Gas Association to assist and advise Southern Tech in developing a suitable curriculum for the department and to coordinate the over-all program to fit the needs of the gas industry. This committee, chairmanned by Fred A. Rives, has guided the department from its beginnings six years ago.

Through March, 1954, 51 students were graduated from the Gas Fuel Technology department. Thirty one of these are now working in the industry while six are either teaching or taking further courses. Seven men

are serving in the armed forces. Of this group three are working outside the L. P. Gas industry. The status of the remaining four is not known.

In June, 1954, 10 more men graduated from the course, and all have gone into industry jobs.

A scholarship program sponsored by the L. P. gas industry has made it possible for 21 men to take the gas fuel course. The first graduate under the scholarship program was Charles A. Studdiford of New Jersey, who completed his work in March of this year and is now working for Suburban Propane Gas Corp., Whippany, N. J.

Five additional scholarship students graduated this June. In addition to these six, 10 of the scholarship students are still in school, four did not complete the course, and one is on temporary leave of absence.

The board of directors of the LPGA

has voted to change this program of financial aid to a student loan fund. In excess of \$10,000 was raised for this purpose at the National LPGA convention.

Loans are now available to qualified applicants to cover tuition and fees on a quarterly basis. The loan is interest-free while the student is in school and for a further period of one year after he concludes the gas fuel course. After that time the loan bears a moderate rate of interest and is payable over a maximum period of five years.

The present gas fuel curriculum is a result of experience and the combined thinking of both faculty and representatives of the gas industry. It comprises a total of 113 credit hours, a credit hour constituting one hour a week class work or three hours a week laboratory work for a period of one quarter.



Model bulk plant and blueprints made by seniors in the gas fuel course in connection with the study of L. P. gas bulk plants.



Student Kenneth Mellott of Mt. Vernon, Wash., practices in the laboratory with a propane torch.





# NEW CHEVROLET TRUCKS

**shorten your schedules  
and cut costs in the bargain!**

You can actually count on a Chevrolet truck doing your job faster and for less money. That's a strong claim, sure; but one that's been proved time after time on job after job.

## EXTRA POWER SAVES YOU TIME

All three Chevrolet truck engines—the "Thriftmaster 235," the "Loadmaster 235" and the "Jobmaster 261"\*—deliver extra horsepower for greater acceleration and hill-climbing ability. You haul your loads on a time-saving schedule and save money doing it—for with Chevrolet's higher compression ratio you use less gas.

## BUILT-IN RUGGEDNESS SAVES YOU MONEY

Stronger, more rigid frames, newly designed clutch; huskier rear axles and drive lines in 2-ton models; higher capacity universal joints in medium- and heavy-duty models—these beefed-up built-in chassis features mean your Chevrolet truck is going to stay on the job for a longer time. They also mean you can expect extra-low operating costs.

Another important advantage is Chevrolet's low original cost—lowest of all lines of trucks! You save the day you buy, and you go right on saving as long as you own that Chevrolet truck. Drop by your Chevrolet dealer's and look over the many models he has to offer. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

**MOST TRUSTWORTHY TRUCKS  
ON ANY JOB!**



## CHEVROLET ADVANCE-DESIGN

### TRUCK FEATURES

**THREE GREAT ENGINES**—The new "Jobmaster 261" engine\* for extra heavy hauling. The "Thriftmaster 235" or "Loadmaster 235" for light-, medium- and heavy-duty hauling. **NEW TRUCK HYDRA-MATIC TRANSMISSION\***—offered on ½-, ¾- and 1-ton models. Heavy-Duty **SYNCHRO-MESH TRANSMISSION**—for fast, smooth shifting. **DIAPHRAGM SPRING CLUTCH**—improved-action engagement. **HYPOID REAR AXLE**—for longer life on all models. **TORQUE-ACTION BRAKES**—on all wheels on light- and medium-duty models. **TWIN-ACTION REAR WHEEL BRAKES**—on heavy-duty models. **DUAL-SHOE PARKING BRAKE**—greater holding ability on heavy-duty models. **NEW RIDE CONTROL SEAT\***—eliminates back-rubbing. **NEW, LARGER UNIT-DESIGNED PICKUP AND PLATFORM STAKE BODIES**—give increased load space. **COMFORTMASTER CAB**—offers greater comfort, convenience and safety. **PANORAMIC WINDSHIELD**—for increased driver vision. **WIDE-BASE WHEELS**—for increased tire mileage. **BALL-GEAR STEERING**—easier, safer handling. **ADVANCE-DESIGN STYLING**—rugged, handsome appearance.

\*Optional at extra cost. Ride Control Seat is available on all cabs of 1½- and 2-ton models, standard cabs only in other models. "Jobmaster 261" engine available on 2-ton models, truck Hydra-Matic transmission on ½-, ¾- and 1-ton models.

The course includes 32 hours of basic sciences—chemistry, physics and mathematics; and 19 hours of communication skills—English, technical writing, public speaking, mechanical drawing, blueprint reading and machine sketching. Eighteen hours are devoted to developing supervisory abilities; courses are given in human relations, sales, contracts, business management and supervisory training. Technical specialties, which includes the theory of

gases, gas utilization and equipment, L. P. gas bulk plants and industrial utilization of gas, receive 44 hours of attention.

Laboratory work accounts for 21 credit hours and involves approximately 210 total hours of practical work in shops and laboratory. The well equipped gas fuel laboratory was made possible through cooperation of appliance and equipment manufacturers. The laboratory equipment includes ranges, gas-oper-

ated refrigerators, various types of space heaters and furnaces, commercial ranges, deep fat fryers, commercial bake oven, a food warming table, a gas brooder, and tobacco curing equipment.

The laboratory engine room has two jeep engines driving electric generators. One of these operates with L. P. gas and the other is in the process of conversion. Fuel is supplied by a motor vehicle tank mounted on an outside wall with the liquid line in place only when the equipment is in use.

The first laboratory course includes the operation of gas burners, building pipe burners, and the operation of safety pilots, gas thermostats, and electric controls. These are studied and placed in operation by the student, who learns first the individual controls which are used on gas appliances. Other laboratory courses include the operation of many different appliances on which these controls are used.

In the field of gas equipment, the student gains practical experience in pipe and tube working, testing and repairing of pressure regulators, and making an L. P. gas installation. A part of the gas installation project is the instruction of the customer—a lady is invited in to act the part of a homemaker—in the operation of the gas range and other appliances. Considerable attention is also given to a study of gas meters, L. P. gas containers, pressure relief valves, and liquid level gauging devices.

The second course in gas equipment is devoted to a study of pumps, compressors, liquid line sizing, and the general layout of L. P. gas bulk plants. Several visits are made to neighboring bulk plants, and the drawing of complete blueprints for a small bulk plant is a required project.

The gas fuel course is open to qualified men now employed in the L. P. gas industry who wish to prepare for responsible technical positions, and to high school graduates of suitable ability who may wish to make careers in this industry. The loan fund was raised to make possible the training of outstanding students who might not otherwise be able to finance their tuition and expenses. At the present time there are not nearly enough men in training to meet the demand for graduates.

# dependability



**...is built into every Superior Valve**

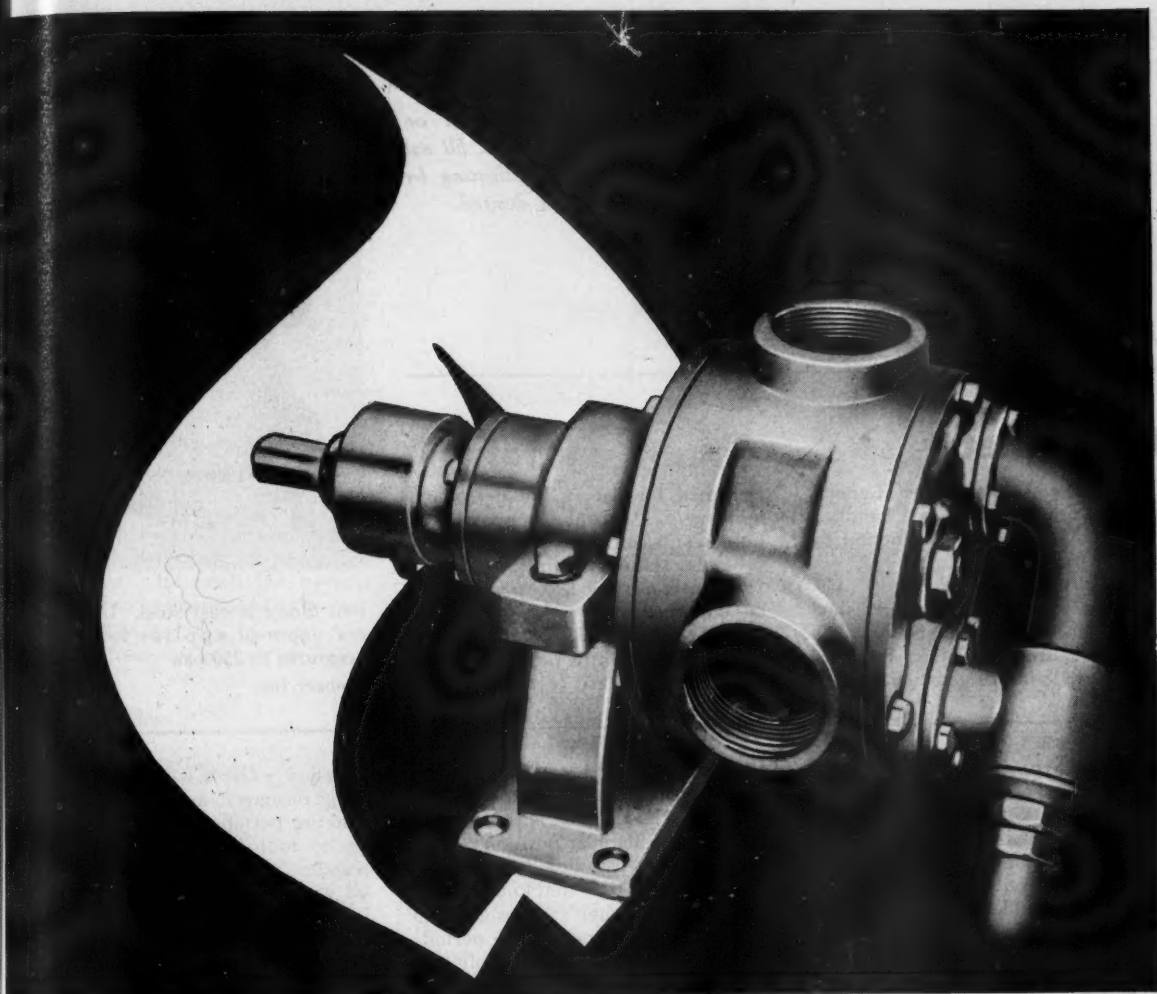
Years of proven service throughout the LP-Gas industry is your guarantee of dependable operation from Superior cylinder valves. Designed for rugged service, they operate easily; there is no freezing or sticking under adverse conditions. Be certain your installations include the most dependable cylinder valves on the market... those made by Superior.

**Superior valve and fittings co.**

Pittsburgh 26, Pa.



types of  
commen  
commen  
g table  
curing  
m has  
ic gen-  
s with  
ne pro-  
plied  
ted on  
d line  
ent is  
se in-  
rners,  
oper-  
ostats,  
stud-  
y the  
divid-  
n gas  
urses  
y dif-  
e con-  
t, the  
ience  
g and  
and  
n. A  
ect is  
er—a  
of a  
f the  
Con-  
n to  
con-  
and  
uip-  
mps,  
and  
bulk  
to  
the  
or a  
ect.  
to  
the  
ore-  
osi-  
of  
to  
The  
ble  
nts  
to  
es.  
not  
to  
ws



## What Do You Want in an LP-Gas Pump...

easier installation . . . better bearings . . . real anti-leak protection? You get all three . . . and lots more in the new line of high quality Fairbanks-Morse LP-Gas Pumps. They're engineered to eliminate all the common causes for complaint.

Take installation for instance . . . the new type mounting bracket permits the entire pump body to rotate when just two bolts are loosened; it's simple to align the pump with pipe connections . . . and there's enough lateral movement to make the power hook-up easy, too.

How about leaks? Not a chance . . . you get double protection . . . rotating mechanical seals which stop all leakage through the shaft end. The secondary, or safety

seal, does not operate, or wear unless the primary seal should fail.

Three heavy-duty thrust bearings in the backhead frame stabilize end play . . . a fourth bearing near the driving end gives additional radial load insurance.

Fairbanks-Morse LP-Gas Pumps are made in models for stationary installations, truck mounting, tank car unloading and bottle filling. Capacities to 55 gpm. For full information, fill out the coupon below and mail it to Fairbanks, Morse & Co.

Fairbanks, Morse & Co.  
3601 Kansas Avenue  
Kansas City, Kansas

Please send literature on the Figure 5147-11 LP-Gas Pump.

Name .....

Address .....

City..... Zone..... State.....



### FAIRBANKS-MORSE

a name worth remembering when you want the best

PUMPS • SCALES • DIESEL LOCOMOTIVES AND ENGINES  
ELECTRICAL MACHINERY • RAIL CARS • HOME WATER  
SERVICE EQUIPMENT • FARM MACHINERY • MAGNETOS



## New Products and Trade Publications

To secure further information on products or new publications, fill out the coupon and mail, indicating by number the items desired.

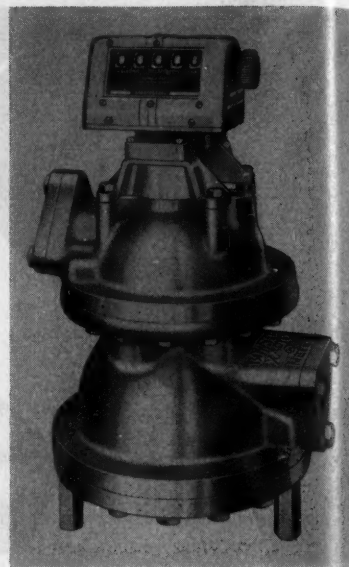
### 1. LPG Meter

Two new Underwriters' Laboratories approved meters for handling L. P. gas are now in production by Bowser Inc.

One size, designated Figure 460-15-4, is rated at 15 gpm and furnished with 1 1/4-in. screwed connections. The larger, Figure 460-50-4, is rated 50 gpm with 1 1/2-in. flanged connections.

Designed for use in the petroleum industry, L. P. gas meters are used in bulk plants, on tank trucks, and at vehicular refueling points.

The new Bowser LPG meters may be equipped with straight-reading, totalizing or ticket-printing dials. Working parts of the new meters are stainless steel, hard carbon and Tef-



lon. Body is cast steel. Underwriters' approval applies for working pressures to 250 psi.  
Bowser Inc.

### 2. Top Burner Controls

An automatic time control for top burners of gas ranges has been developed by Robertshaw-Fulton Controls Co. This control, solving a problem that has baffled the gas industry for 25 years, has been named the "Potwatcher."

The same principle has also been applied to a new time and temperature control for gas ovens under the name "Temp 'n Time." The new oven control, which requires no expensive clock, electrical connections, tubing or other costly installation and design factors, may be included on lower priced ranges.

The distinctive feature of the "Potwatcher" and "Temp 'n Time" is found in the unique timing mechanism, which operates with no greater energy source than the movement of

an ordinary pocket watch. Enclosed within a small control knob, the entire timing mechanism is replaceable as a unit. A manual position on the control allows it to be used as a conventional hand-operated knob.

The "Potwatcher" is designed to time cooking in one minute periods up to one hour. The user simply sets the timer and then adjusts the gas cock for any desired flame height. Both timer and gas cock are combined on one dial, which is about the size of conventional top burner gas cocks now in use. At the end of the automatic cycle, the set handle of the timer will return to the "off" position and the gas will automatically shut off. If the user does not wish to time the cooking cycle, the timer dial is depressed and the indicator turned to the manual position.

The "Temp 'n Time," which can be

installed without altering present range designs in any way, times oven cooking periods in 15 minute units up to four hours. Like the "Potwatcher," it is suitable for use with all gases and may be used with or without the timing feature.

Robertshaw-Fulton Controls Co.

### 3. LPG Odorants

Sharples Chemicals Inc., producer of natural gas odorants, is offering two odorants for LPG producers: LPG odorant 1010 and LPG sulfide odorant 1013. Both are manufactured by direct chemical means for the LPG industry.

LPG odorant 1010 contains a minimum of 99% ethyl mercaptan. Sharples LPG odorant 1013 is a new type of product for this industry.

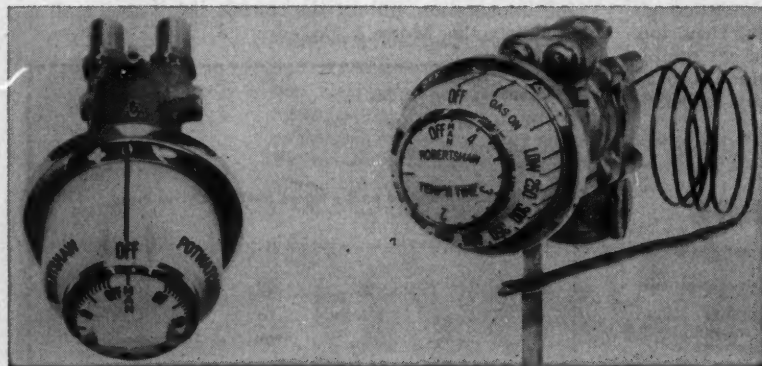
The LPG odorant is produced synthetically, and the sulfide odorant is a highly purified synthetic product containing at least 98% sulfide. It has a strong, penetrating, gas-type odor. Samples and additional information are available.

Sharples Chemicals Inc.

### 4. Miniature Pilot Couple

An 80% reduction in heat as compared with the average gas appliance pilot burner has been achieved with a miniature pilot couple recently developed by General Controls Co.

The new pilot couple is an integral



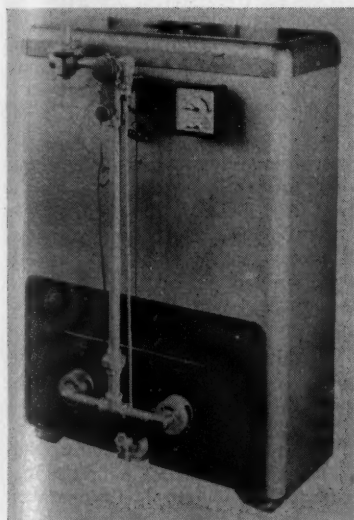
ly-combined pilot burner and thermocouple. The thermocouple is imbedded in the tip of the burner, and produces the electrical current for automatic operation of safety controls. The unit's bead-size flame creates as little as 75 Btu per hour against an ordinary pilot burner's output of 500 Btu.

The PC-D low Btu pilot couple, as the new unit is designated, is designed especially for gas appliances where a minimum of heat generation is desired in the pilot standby period. Such applications include gas ranges, coffee urns, hot plates, broilers and other small appliances that have a pilot along with safety controls.

Secondary air only is burned in the miniature pilot couple so any problem of linting is avoided. The unit produces a small, stable blue flame and is recommended for applications where extreme draft conditions are not present. Its small size permits the PC-D to be mounted in the closest of quarters.

General Controls Co.

## 5. Gas Boiler

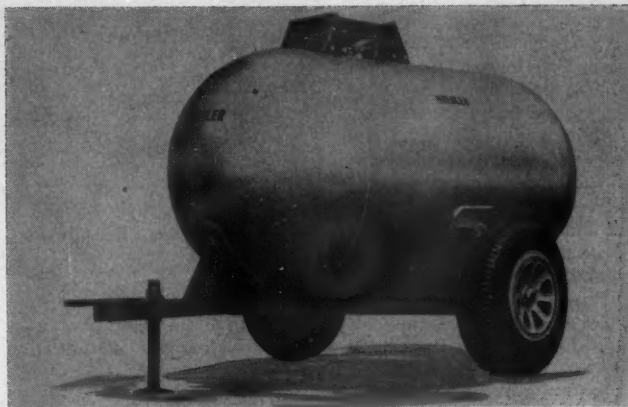


An "Arrow-Line" 200-U-2 gas-fired boiler has been introduced by Bastian-Morley Co. Inc.

It features "Unitrol" control. AGA input and gross output have been increased to 70,000 and 56,000 Btu/hr, respectively, from 62,500 and 52,000 in preceding similar models.

Standard equipment includes cast iron boiler with drill port burners, jacket with Fiberglas insulation, Unitrol control, 100% shut-off safety pilot, gas pressure regulator, drain cock, combination altitude gauge and thermometer, and draft diverter.

The boiler can be used with all



## 6. Storage Tanks

Buehler Tank & Welding Works is now in production with a complete line of anhydrous ammonia liquid fertilizer tanks ranging in sizes from 120 gal. to 12,000 gal.

Applicator tanks for easy attachment to tractors in 120 and 172 gross gallon sizes are available with or without fittings.

Trailer tanks like the above may be had in 2- and 4-wheel types and

in sizes ranging from 500 to 1000 gal. Trailer tanks are equipped with fittings, special built-in baffles and extra strong guard boxes.

Storage tanks are built up to 12,000-gal. capacity. All anhydrous ammonia storage tanks are built up to 250 lb WP, ASME code.

A colored, descriptive bulletin is available upon request.

Buehler Tank & Welding Works

gases. It is ideally suited for hot water heating in low-cost housing projects, small to medium size homes. It will heat homes up to five rooms in size.

Less than a yard high, it occupies little space and has attractive grey baked enamel finish. Shipped completely assembled, controls readily accessible, easily installed.

Bastian-Morley Co. Inc.

## 7. Commercial Range

A complete new line of heavy duty commercial gas cooking equipment is now manufactured by Magic Chef Inc.

The new Magic Chef battery installation includes three gas ranges, deep fat fryer, unit broiler, baking and roasting oven, and pizza oven. Other new equipment includes a griddle-

For notices of more new products and trade publications turn to page 172 of the Power Section.



### READERS' SERVICE COUPON

Just fill in this coupon for Products information and copies of new publications, and mail to

BUTANE-PROPANE NEWS, 198 S. Alvarado St., Los Angeles 57, Calif.

9/54 Fill in numbers of items in which you are interested.

No. \_\_\_\_\_ No. \_\_\_\_\_ No. \_\_\_\_\_ No. \_\_\_\_\_  
No. \_\_\_\_\_ No. \_\_\_\_\_ No. \_\_\_\_\_ No. \_\_\_\_\_

NAME AND TITLE \_\_\_\_\_

FIRM'S NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

broiler unit, add-a-units, double deck roasting oven, and elevated broiler.

The many new features incorporated in the equipment are designed to provide greater efficiency and convenience in kitchen operation.

New features include functional "Flowline" shelf design that permits partition free, full length storage of utensils and easy cleaning access. Range top burner box, oven, and oven burner box are fully protected with porcelain enamel linings. Formed steel construction with welded frame assemblies is utilized



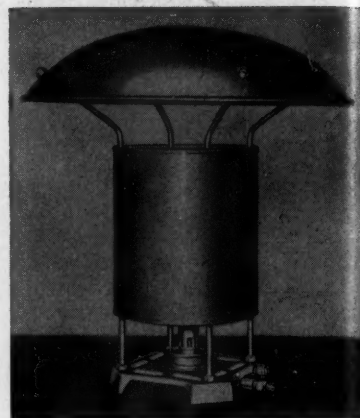
throughout the new line to add strength and durability.

Other features include new sim-

mer-set valves, cool chrome oven door handles, 2½-in. thick insulated oven door, one-piece fry top casting, sanitary spillover catch-trays, plus all features included on the previous Magic Chef equipment.

*Magic Chef Inc.*

## 8. Salamander



Weldit Inc. is marketing a unique L. P. gas portable salamander.

This salamander is the result of over two years of careful experimentation and is designed to give maximum high heat output. It generates 151,200 Btu's and consumes 7 lb of L. P. gas per hour.

An outstanding feature is the flame dome heat distributor plate which gives 360° heat distribution. It requires no priming or pumping, has positive control, no smoke or soot and is fully portable. Rugged construction of steel and cast iron assures long service life.

The salamander is available in two models: No. 800 Weldit portable heat-erama floor type design, height 22 in., width 19 in., weight 13 lb, operates off of any standard LPG tank; and No. 850 tank top model, height 20 in., width 19 in., weight 14 lb, operates off of any LPG tank equipped with tank-top valve.

*Weldit Inc.*

## 9. Cornice Ventilator



A new type attic breather unit has been put on the market to increase

Like Hundreds of Others...

**YOU TOO CAN SAVE TIME & MONEY**

with **VIKING LP-GAS GG 196**

**FUELING UNITS**



30 GG196 Units  
being made ready  
for shipment.

**F**OR fast, positive transfer of LP-gas from storage to tractors, taxis, trucks, etc., the Viking GG-196 can't be beat. Transfer is safe, smooth and fast. Also ideal for bottle filling operation.

Unit comes complete with 10 GPM pump direct connected to repulsion induction, ½ HP, 1750 RPM, explosion-proof motor with built-in switch and voltage changer.

Pump includes safety bypass valve on head set for 60 PSI and a vapor pressure safety relief valve on suction port. Pump also features dry liquid mechanical seal, non-lubricated inner bearing, O-ring head gasket and ball bearing supported pump shaft.

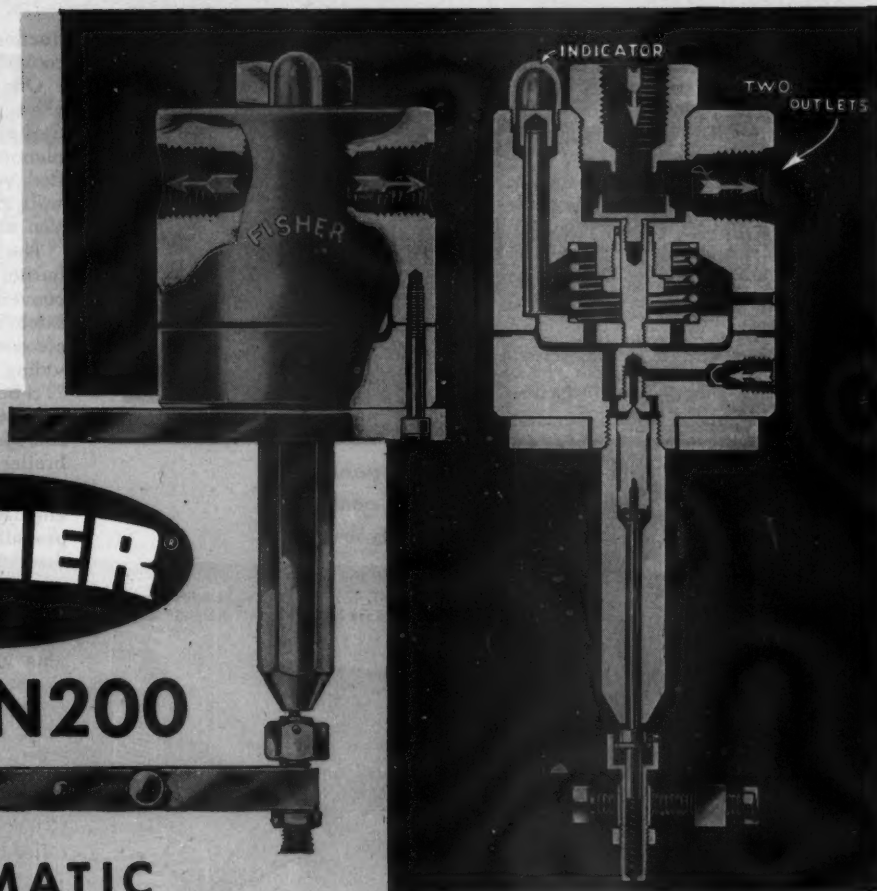


Send today for complete information and prices. Ask for bulletin A2300B.



**VIKING** PUMP COMPANY  
Cedar Falls, Iowa





**FISHER**

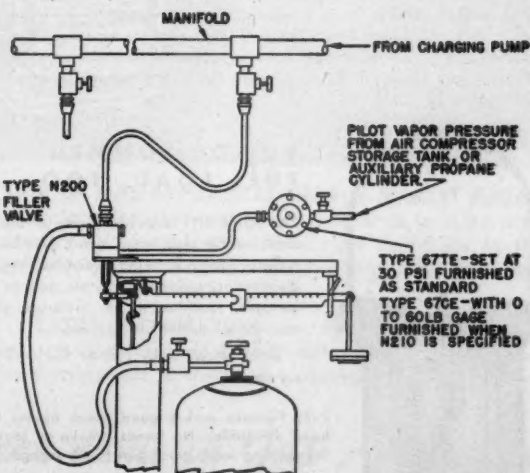
**TYPE N200**

## AUTOMATIC CYLINDER FILLING VALVE... 5 Years of Successful Field Performance

### FEATURES

- Positive feather-touch pilot loading control—vibration cannot cause improper cutoff.
- Red indicator appears when cylinder is exactly full and flow is cut off automatically.
- Second outlet for simultaneous filling of two cylinders.

Also available as Type N210 which includes Type 67CE auxiliary regulator having 0-60 lb. pressure gauge in side outlet, and mounting bracket.



**FISHER GOVERNOR COMPANY • Marshalltown, Iowa**

Eastern Office: 212 New Dickson Bldg., Westport, Conn.

LEADS THE INDUSTRY IN RESEARCH FOR BETTER GAS PRESSURE CONTROL

**FISHER**

*Since 1880*

attic air circulation. With a constant movement of air resulting, a home should be cooler in summer and warmer in winter, according to the manufacturer. The reduction of moist air eliminates heat loss.

Known as the Damp-Vent cornice ventilator, this breather unit is made of sturdy cast aluminum with built-in copper screen. It is treated with iridite to eliminate corrosion.

Damp-Vent Co.

## 10. Built-in Range Units

Caloric Stove Corp. announces pro-



duction of a new line of built-in gas cooking equipment.

Offering special flexibility in kitchen planning, the built-in units afford architects, builders and kitchen planners the opportunity for unlimited variation in kitchen layout as well as greater beauty and distinction in modern kitchen decoration.

The separate oven-broiler and top burner units, which can be placed at convenient heights anywhere in the kitchen, offer the homemaker "no-stoop convenience," as well as providing all the features of Caloric's "Tri-Set" burners, heavy Fiberglas insulation, automatic clock control and seamless porcelain oven and broiler.

The Caloric built-in is designed and engineered exclusively for gas, thus providing smokeless broiling with the door closed.

Providing smart styling and versatility for the kitchens, door panels for the oven-broiler units are available in the customer's choice of bright or satin metal-finishes, or porcelain enamel in black, white, pastel blue, green or yellow. To further accent the kitchen decorative scheme, detachable oven-broiler handles are provided in a wide range of attractive colors.

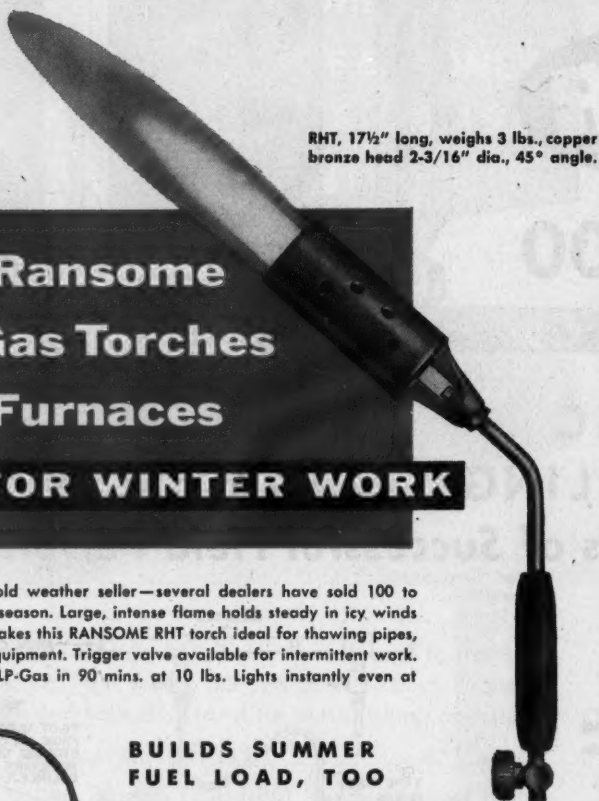
Caloric Stove Corp.

## 11. Wall Heater



This Armstrong wall heater is modern in appearance and attractively designed. The front is one piece of white porcelain and the panels are a new shade of platinum gray.

The lower panel is hinged to give easy access to the valve and air regulator. Heater is unvented, AGA approved, and has an input of 8000 Btu. It is available for any gas.



RHT, 17½" long, weighs 3 lbs., copper bronze head 2-3/16" dia., 45° angle.

## Sell Ransome LP-Gas Torches and Furnaces

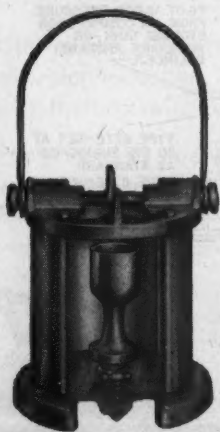
### FOR WINTER WORK

Here's real cold weather seller—several dealers have sold 100 to 200 in single season. Large, intense flame holds steady in icy winds and drafts, makes this RANSOME RHT torch ideal for thawing pipes, pumps and equipment. Trigger valve available for intermittent work. Burns 1 gal. LP-Gas in 90 mins. at 10 lbs. Lights instantly even at 30° below.

### BUILDS SUMMER FUEL LOAD, TOO

RANSOME RHT torch has plenty of summer uses—melting lead, babbitt and white metal; pipe bending, preheating, fender repairs, singeing, weed-burning, flame cultivating, disinfecting, paint burning, etc. Sells to oil fields, farmers, garages, machine shops, factories, sheet metal shops, contractors, public utilities, etc.

Stock NOW. Write TODAY for price list, discounts and catalog.



P-25 Furnace makes good space heater (removable head available). No fumes, smoke or soot. Designed for melting lead, glue, paraffine, asphalt, etc.

## RANSOME COMPANY

Liquified Petroleum Gas Division

ROOM A9 • 4030 HOLLIS STREET • EMERYVILLE, CALIF.

41

*Ransome*

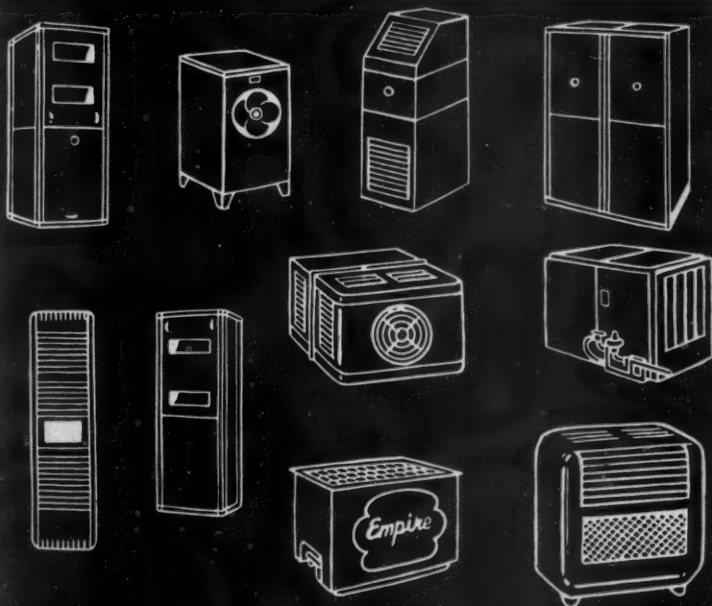


# Partners in Perfection

## EMPIRE

AMERICA'S FINEST QUALITY LINE  
OF APPLIANCES!

Now available to increase your sales volume is a variety of attractive Gas Heaters and Air Conditioners that will stop store traffic. You will find increased sales and profits.



- All Weather Air Conditioners
- Forced Air Winter Air Conditioners
- Counter Flow Winter Air Conditioners
- Space Saver
- Gas Recessed Heating Unit
- Cooling Towers
- Summer Air Conditioners
- Gas Floor Furnaces
- Window Air Conditioners
- Gas Circulator Heaters

### THE MOST COMPLETE LINE OF GAS APPLIANCES ON THE MARKET TODAY!

The EMPIRE line is growing in sales, demand and importance in store after store throughout the country. Now with the many new additions to this famous line of Gas Appliances, you'll find this a more profitable line than ever before.

### EASIER SALES . . . EASIER INSTALLATION . . . EASIER SERVICE

EMPIRE Gas Appliances are skillfully designed, scientifically engineered and produced of the finest materials to insure the utmost in silent, efficient operation.

*Empire a great name in Gas Appliances*

See your distributor or write direct to EMPIRE today.

**STOVE COMPANY**  
BELLEVILLE, ILLINOIS

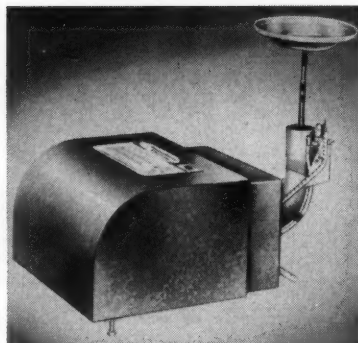


Model 108 is sized to fit all standard openings. It is 21 in. high and 13 in. wide so it can be installed between any standard 16-in. studs. The recessed section is only 3½ in. deep.

Armstrong Products Corp.

## 12. Conversion Burner

The "Stanflame" gas conversion burner has been introduced by American-Standard. It is available with adjustable inputs ranging from 60,000 to 325,000 Btu per hour. It fits the vast majority of boilers, furnaces



and winter air conditioners.

The primary air control is adjustable to achieve efficient gas-and-air mixture. It is designed to prevent stoppage by dust or lint, even when it is in a nearly closed position. The secondary air control is located inside the housing, so it can be easily adjusted without affecting the primary air setting. Adjustable supports provide for quick, correct positioning in the combustion chamber and for easy leveling of burner on uneven floors.

American Radiator & Standard Sanitary Corp.

## 13. Tank Gauge

Recently published is a piece illustrating the improved "Criterion" tank gauge and describing several features such as the tubular steel support members, new style shrouded crown gears, and the general rugged construction throughout.

Other outstanding features are extruded aluminum gear yoke; stainless steel head plate; and snap-on interchangeable dial chambers. The "Criterion" is hermetically and precision manufactured.

Rochester Manufacturing Co. Inc.

## 14. Furnace Facts

A brochure, "You Can Measure Heating Quality," is now available to interpret for the homeowner the construction and operation of a modern automatic forced warm air furnace. The 12-page booklet is lithographed in four colors and fully illustrated. It is written for easy reading.

Checks points include such items as durability, cleanliness, economy, safety and comfort. Heating contractors and builders should find such a booklet a time-saver when used in their discussions with customers.

Janitrol Heating & Air Conditioning Division, Surface Combustion Corp.

## 15. Hardening Furnaces

Surface Combustion Corp. recently released a new bulletin, SC-164, on the company's complete line of furnaces for hardening and drawing or tempering operations.

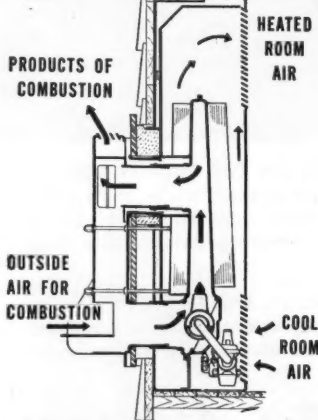
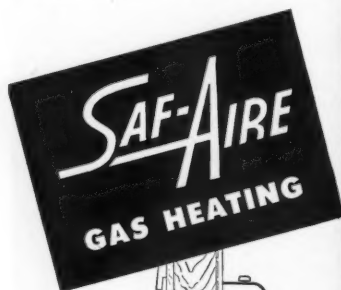
Included in this fully illustrated, two-color bulletin are direct-fired and controlled atmosphere furnaces of both the batch and continuous types. Completely automatic harden and draw lines are of special interest.

A handy table on the back page provides data on the hardness achieved at specific drawing temper-

MAKE YOUR  
NEXT JOB

**"Safety-  
Sealed"**

...FOR ONE ROOM  
OR AN ENTIRE HOME



Both flame and products of combustion are sealed away from the room—safer, cleaner.

For added rooms, enclosed porches, garages, attic apartments, workshops, motels, here's the safe, economical way to supply heat. Saf-Aire burns any kind of gas heating fuel in a sealed chamber. Smartly styled—manually or thermostatically controlled.

Compare these Saf-Aire advantages—

1. Uses only outside air for combustion.
2. Combustion products are vented to the outside—can't enter room.
3. No chimney, ducts or electricity required.
4. Easily installed through the wall at any level.
5. Individual room-by-room temperature control.
6. Capacities to 30,000 BTU

SEND TODAY FOR DESCRIPTIVE LITERATURE



**STEWART-WARNER**

U. S. MACHINE DIVISION, Dept. AT-94, Lebanon, Ind.

# Right track to faster service, greater LP-Gas profits

Here is part of the greatly enlarged, self-owned and operated Cities Service tank car fleet . . . one of the reasons why Cities Service LP-Gas customers always enjoy fast, dependable delivery. Equally important are the 19 modern producing plants and storage wells that assure consistently highest product quality . . . quality that creates satisfied consumers, greater profits for distributors of Cities Service LP-Gas. To learn all the facts, contact your nearest Cities Service office.



**CITIES**



**SERVICE**

**OIL COMPANY**

406 W. 34th Street  
Kansas City, Missouri  
20 No. Wacker Drive  
Chicago, Illinois

500 Robert Street  
St. Paul, Minnesota  
6611 Euclid Avenue  
Cleveland, Ohio

atures for the most common steels.  
Surface Combustion Corp.

## 16. Tank Trucks

If you want to study specifications for tank trucks and transports—especially the diagrams for truck tank plumbing—send for a copy of the latest catalog of Trinity Steel Co. Inc.

This folder will give you some interesting and complete information, including prices, on the important features of LPG truck tanks and you won't have to read more than a dozen large-type pages to get the whole story. There is also included a cut-

away picture of Trinity storage tanks for either LPG or anhydrous ammonia that will give you a vivid impression of how these tanks are made and perform.

Trinity Steel Co. Inc.

## 17. Standards Revisions

The 1954 edition of National Fire Protection Association Pamphlet 58, "Standards for the Storage and Handling of Liquefied Petroleum Gases," is now available.

Chris Neely, staff engineer, LPGA, has made a careful analysis of the changes and additions in the edition,

which are summarized by him:

1. Requirements for spacing between L. P. gas containers and flammable liquid tanks have been changed. See paragraphs B.5(i, j, k).

2. Changes in the types of buildings and enclosures into which liquid L. P. gas can be piped under the standards will be found in paragraphs B.7(b) and B.12(a). The standards as now written allow liquid piping to be led into research and experimental laboratories, buildings or separate fire divisions of buildings used exclusively for housing internal combustion engines.

3. The recommendation that 5-year tests of relief valves be made on containers in excess of 1200-gal. wc has been changed to apply to containers in excess of 2000-gal. wc. See paragraph B.9(h), note 2(b).

4. The so-called "5 foot" rule has been changed, with respect to ICC cylinders, to the "3 foot" rule. See paragraphs 1.3(a) and 1.5(b).

5. Non-stationary containers having a maximum water capacity of 12 lb, temporarily used for demonstration purposes, need not have relief devices' discharge piped outside of a building. See paragraph B.9(k).

6. The use of L. P. gas as a motor fuel for industrial tractors and lift trucks is now covered in Division IV. In particular, see paragraphs 4.1(c), 4.2(b), 4.4(d), 4.4(f) and 4.8(b).

7. Requirements for the use of L. P. gas fueled transport cargo heaters are now included in Division VI. In particular, reference to such standards is covered in the introduction and paragraphs 6.6(d), 6.8(e), 6.9(c and e), 6.10(b, c, e, and f).

8. The requirements for charging containers in trailer camps have been changed to make them consistent with other sections of the pamphlet. See paragraph 6.12.

9. Provisions for stationary or portable engines in buildings have been made in paragraph 4.10 of the May, 1954, edition of Pamphlet 58.

10. New standards covering L. P. gas service stations have been drawn up and form a separate Division VII.

A complete cross-reference index adds materially to the ease of locating information in the pamphlet.

Pamphlet 59, "Standards for the Storage and Handling of Liquefied Petroleum Gases at Utility Plants," has also been revised for the 1954 edition, which is now available. The revisions include complete rearrangement, and new requirements have been added which limit the quantity of liquid in lines between shut-off valves. This pamphlet is also completely indexed.

National Fire Protection Association

**4 new sales helps**

**to keep Reznor first in sales—first in dealer profits**

More dealers make more money selling Reznor. Here's why. Reznor is the world's most widely advertised gas unit heater. And Reznor gives you the right tools to build sales from the acceptance created by Reznor national advertising. That's why Reznor stays at the top—first in sales year after year.

The four pieces shown above are powerful new sales aids which will help Reznor dealers to even better sales records this year. Bulletin F54-UH will tell your prospects the complete story on Reznor suspended models in six colorful pages, including full color illustrations of some typical Reznor installations.

"Applications of Unit Heating" (Bulletin SA-541) is a handy pocket-size manual which covers the advantages of gas unit heaters as compared with other systems, as well as a lot of valuable hints on how to plan a successful Reznor installation. You'll want to have a copy with you at all times. Distribution of this piece to builders and architects will give your sales a boost, too.

The new Reznor Sales Planner—your guide to local promotion—gives

you suggestions on how to get the most out of your advertising dollar through newspaper ads, direct mail, radio and TV. It includes sample sales letters and radio spots.

To help you plan your newspaper advertising, a new Mat Book shows 57 complete ads you can run as is plus a wide variety of illustrations of the various Reznor units for use in building your own ads.

If you aren't now a Reznor dealer, or if you don't yet have these new sales helps, you can't be getting your full share of the unit heater market. Don't miss any more sales. Your nearby Reznor distributor has all the facts. Get in touch with him today. Or drop us a line for his name and address. **Reznor Manufacturing Company, 4 Union St., Mercer, Pennsylvania.**





Caloric's dramatically new built-in gas cooking units give new freedom in kitchen planning. Another Caloric product, planned to pay off for you . . . and like every Caloric appliance, it is planned exclusively for gas

No wonder Caloric built-in gas cooking equipment is gaining fast acceptance. It affords builders, architects and home owners an unmatched flexibility in planning kitchen layouts. Of course, these Caloric units offer the many advantages of gas equipment, including eye-level visibility for controls . . . and no worries about broiling with the oven door open. There's no doubt about it . . . feature for feature, dollar for dollar, built-in Caloric units offer more for less than any other on the market. Ask your Caloric representative to explain why Caloric built-in units are so vastly superior to all others.



Please send me complete information on the Caloric built-in gas cooking units.

Name

Address

Mail this coupon to Dept. BP, Caloric Stove Corporation, Topton, Pa.

# CALORIC

TOPTON, PA. — RANGES • DRYERS • DISPOSERS • BUILT-IN UNITS



## ASSOCIATION NEWS

### Wyoming LPGA Meets in Casper

Wyoming Liquefied Petroleum Gas Association held its annual meeting at the Townsend hotel in Casper recently, with 50 attending the two-day affair.

New officers include: T. C. Wassenberg, Wassenberg Gas & Appliance Co., Gillette, president; Burt Sheldon, Ranchers Gas & Supply Co., Cheyenne, first vice president; Bill Denny, Wyoming Gas Service, Newcastle, re-elected second vice president; and Ira Lamb, Wyoming Gas Service, Lusk, and Vernon Moncur, Pure Gas Service Co., Powell, re-elected secretary and treasurer, respectively. Immediate past-president C. A. Brown, Pure Gas Service Co., Riverton, will serve as director-at-large.

### Tennessee Delegates Witness Demonstration

Some 155 delegates witnessed the Harper-Wyman "Gas vs Electricity" demonstration at the recent meeting of the Tennessee LPGA in Nashville. This was the group's seventh annual convention.

New officers elected include Noble Davis, Dyersburg, president; John



**Bissell Smith**, Harper-Wyman Co., Chicago, talks of the advantages of gas over electricity during a demonstration at the Tennessee LPGA convention.



**Leaders in the Tennessee L. P. gas industry** were presented plaques in honor of their outstanding achievements. Left to right, presidents of the association: E. C. Ansley, 1954; J. S. Jones, 1953; G. T. Scott, 1952; W. G. Petty, 1950-51; Joe Thompson, 1949; and Paul Boyd, 1948.

Bise, Nashville, vice president; W. G. Darden, Hohenwald, secretary-treasurer; and F. W. Hamilton, Harry Lea Jr., and R. P. Muse, directors.

Speakers at the convention included Mayor Ben West of Nashville; Art Kreutzer of the National LPGA; John Bise, Triopane Gas Co., Nashville; Paul Tucker, Phillips Petroleum Co., Bartlesville; "Sunshine" Flack from New York City; Ed Harding, Washington, N. C.; Dr. W. H. Alexander, Oklahoma City; and Max Petty, Delta Tank Co., Baton Rouge.

The 43 ladies attending the convention made a trip to the home of Andrew Jackson.

### Kentucky Operators Attend L. P. gas Short Course

Ninety-seven Kentucky L. P. gas operators and servicemen were awarded certificates on completion of the first L. P. gas short course held at the University of Kentucky, Lexington.

Dr. Hamilton Tapp, University of Kentucky; J. T. Underwood Jr., state fire marshal, and Jess B. Ward, chief L. P. gas inspector, Kentucky, presided at the general sessions of this first annual Kentucky L. P. gas service school, which was sponsored by the office of the state fire marshal, the Kentucky Liquefied Petroleum Gas Association, and the college.

"Accidents, in the main," stated Prof. Earle Clifford, Southern Technical Institute, "are caused by ignorance, carelessness, and downright stupidity."

Professor Clifford addressed the opening session, at which time he paid tribute to the state fire marshal, chief L. P. gas inspector, and the Kentucky LPGA for the fine example which Kentucky has set for the nation in the promotion of an educational program for L. P. gas.

### Pennsylvania Announces Welfare Insurance Plan

Pennsylvania LPGA has announced a welfare insurance plan for dealers in the state. The plan requires 600 employees to be effective and trustees for the plan hope soon to have enough dealers to permit the plan to go into effect.

The plan will include up to \$5000 life insurance, with no medical examination required, \$5000 for accidental death, \$40 per week accident and sickness benefits, and a maximum of \$200 surgical payment.

The insurance program is being written by the Prudential Insurance Co.

### First Regional Conference In Public Relations Held

The first regional public relations conference was held recently in Boston. Of the 110 people in attendance, 25% were members of LPGA.

The conference was sponsored by five associations: American Gas Association, Gas Appliance Manufacturers Association, Independent Natural Gas Association of America, Liquefied Petroleum Gas Association of



BARNES & SNIPES - ARCHITECTS

**"Janitrol gas unit heaters helped us build within our budget"**

Heating Installation  
by Hausgas, Inc.  
Washington, Mo.

... Statement by Mr. James  
Dawson, Supt. of Schools, Crawford  
County, Bourbon, Missouri.



"By using Janitrol Gas Unit Heaters instead of a central heating system, we saved enough to build within our budget. Installed in September, the 17 Janitrol Unit Heaters have proved highly satisfactory!", said Mr. Dawson.

The teachers, too, are very happy with this heating system. Each room being thermostatically controlled, each teacher can maintain any desired temperature.

Why not consider the *practical*

*money-saving advantages* of Janitrol Unit Heaters in your specifications... whether for a new plant a remodelled building or to replace an obsolete heating system that is costly to maintain and operate?

Bruce F. Barnes, of the firm of Barnes and Snipes, architects, writes, "The reasons for considering your equipment included economy of installation and flexibility of handling the heating problem. Savings over other equipment approximate over 50%."

Write today for your copy of Businessman's Blue Book of Better Heating. It gives numerous examples of correct unit heater installation practices for many types of buildings.

Engineered by the makers of the famous furnaces that heat most of the products of big name industry.

**Janitrol**  
GAS-FIRED UNIT HEATERS

SURFACE COMBUSTION CORPORATION • TOLEDO, OHIO

SEPTEMBER, 1954

111



New England Inc., and New England Gas Association.

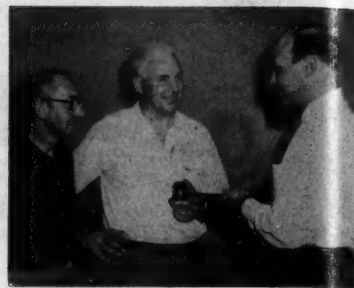
Those who attended the conference felt that they received greater insight into the public relations problems of all segments of the gas industry. This was possible because the plans, programs and activities of the entire industry were represented at the conference.

The Boston public relations meeting had as its purpose (1) to present the high spots of public relations plans, programs and facilities of the three cooperating national associa-

tions as they affect and benefit the New England distributing gas utilities, and (2) to present, through speakers and a panel, public relations ideas, experience and procedures of interest and use to local utilities.

### Minnesota LPGA Meets At Bemidji Vacation Land

The Minnesota LPGA summer convention was held recently at Birchmont Lodge, Bemidji. The crowd of 160 people were enthusiastic over the



Past President Steve Fligelman receives gavel for outstanding contributions from Gil Bursinger, Northwestern Blaugas Co., left, and Frank Carpenter, United Petroleum Gas Co., right.



When you buy LP-Gas from Carter, you have the assurance of high quality and dependable service. Years of experience in producing and marketing LPG make Carter an unexcelled supplier.

**THE CARTER OIL COMPANY**  
**TULSA, OKLAHOMA**

program, accommodations and vacation-land atmosphere of Bemidji.

Isi Statz, director of fire prevention for the state of Wisconsin, demonstrated the hazards of fire and explosion. Carl Sorby of Roper Co. put on an excellent presentation of modern gas range cooking techniques with a "Sorby Sales Story."

Highlights of the banquet were the presentations of the various prizes by Max Fetty of Delta Tank. Sam McTier of Bastian-Blessing added to the festivities by performing on the guitar.

A silver engraved gavel was presented to Past President Steve Fligelman of Consumers Gas Co., Detroit Lakes, for the outstanding contributions he made during his term of office to the advancement of the welfare of the L. P. gas industry in Minnesota.

Roger Kelly, Columbian Tank Co., won the golf tournament with an outstanding score of "71." Many members tried to win the trophy. The ladies' golf tournament was won by Mrs. Chuck Tenney, Willmar Gas Co., with a good card of "52" for nine holes.

Fishing contest prizes went to Mrs. Frank Carpenter for the largest fish; Dwight Sutherin, Caloric Stove Co., was second with Doug Havens of Dearborn getting a prize for the greatest number of fish. The fish eating contest was held on the lawn under moonlit sky with Lake Bemidji as the background.

### CNGA Elects Lyles President

A. C. Lyles, senior gas engineer, General Petroleum Corp., officially assumed the duties of president of the California Natural Gasoline Association at the annual meeting of the board of directors held at the Biltmore hotel recently. The association's new president became a member in

receives  
is from  
as Co.,  
Petro-

vaca-  
dji.  
ention  
emon-  
explo-  
out on  
modern  
with a

re the  
es by  
a Mc-  
o the  
n the

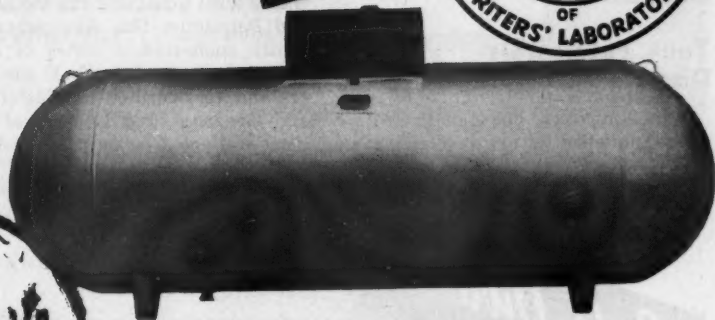
pre-  
ligel-  
etroit  
tribu-  
m of  
wel-  
Min-

Co.,  
out-  
nem-  
The  
n by  
Gas  
nine

Mrs.  
fish;  
Co.,  
s of  
the  
eat-  
awn  
idji

eer,  
ally  
t of  
esso-  
the  
Bilt-  
on's  
in

WS



## LET'S TALK **CENTS** ABOUT A McNAMAR TANK!

**McNAMAR NOW OFFERS THE MOST  
COMPETITIVE PRICES IN THE INDUSTRY  
FOR QUALITY CODE TANKS.**

Anywhere, McNamar can save you money by truck or by F.I.T. rail shipment. Whether it's a 115 gallon domestic system or a 6000 to 30,000 gallon storage tank, we can meet your requirements . . . for size . . . quality of workmanship . . . speed of delivery. So let's talk cents — make your next tank a McNamar.

- UL approved on all standard sizes.
- ASME 250 lb. working pressure meets and exceeds all requirements of U-69.
- Three liquid lines (Built in excess flow).
- 115 gallon to a 30,000 gallon storage.



# McNAMAR

## BOILER & TANK CO.

BOX 868 • TULSA, OKLAHOMA

1927 and has served in many capacities.

Elected to the office of vice president was C. L. Case of the Continental Oil Co. in Ventura. Thirty-four members of the directorate were elected for a two-year term. E. R. Millett Jr. was again appointed as secretary-treasurer for the 1954-1955 fiscal year.

### Tank Fabricators Dissolve Association

A meeting of the board of directors of the Liquefied Petroleum Gas Tank

Fabricators Association Inc. was held in Dallas, June 24. Due to lack of funds to carry on, it was decided to dissolve the association effective as of June 30, 1954.

### West Coast LPGA Sponsors Eight Schools

The West Coast office of the Liquefied Petroleum Gas Association recently sponsored a series of eight educational schools for L. P. gas dealers and service men in Washington and Oregon. Fred Lindsey of William Wallace Co. conducted the

schools on the subject of "Proper Venting of Gas Appliances."

M. A. Ennis, West Coast secretary of the association, reported that the schools were well attended and that plans are under way to expand and broaden the educational activities of the association for the whole West Coast area.

### Edward Casper Elected New N. D. President

Edward Casper of Dakotas Bottlegas Co., Carrington, N. D., was elected president of the North Dakota LPGA at its recent meeting at the Gardner hotel in Fargo. Seventy-four members registered at the convention.



Edward Casper

Other officers elected were Art Morken, Farmers Union Central Exchange, Williston, vice president; and Kenneth Backlund, Bison Gas Co., Kenmare, secretary-treasurer.

The association voted to affiliate with the National Liquefied Petroleum Gas Association.

Speakers at the convention included Frank Carpenter, United Petroleum Gas Co., discussing "L. P. vs Natural Gas"; H. C. Lindstrom, General Controls Co., showing a film and talking on "Gas Controls"; C. F. Butterworth, Acme LP-Carburetion Co., telling "How to Induce Mr. Implement Dealer to Sell L. P. Tractors"; and Al Luger of William Wallace Co. discussing "Venting."

It was decided that the 1955 convention will be held in either June or July.

### Mississippi LPGA Sponsors LPG Seminar

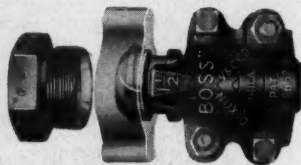
An L. P. gas seminar, sponsored by the Mississippi LPGA, was held July 12-13 at the University of Mississippi. The program was designed to enable L. P. gas dealers to be better managers, render greater service to their customers and make more profit.

The program covered cost accounting, cost determination for L. P. gas management, the national L. P. gas credit picture, customer records, advertising, sales promotion, and insurance.

Certificates were presented upon completion of the course.



## "G J-BOSS" GROUND JOINT FEMALE COUPLINGS—STYLE X-34



Built to assure maximum safety and efficiency on all L-P Gas and other hose connections. Ground-joint union between stem and spud provides a washerless, thoroughly leakproof seal. Super-strong "Boss" Offset and Interlocking Clamps exert powerful full-circumference grip on the hose. All parts are steel or malleable iron, completely rustproofed. Sizes 1/4" to 6", inclusive. Also available in washer type, and with companion male couplings.

Stocked by Manufacturers and Distributors of Industrial Rubber Products

# DIXON Valve & Coupling Co.

GENERAL OFFICES & FACTORY—PHILADELPHIA 22, PA. BRANCHES—CHICAGO BIRMINGHAM • LOS ANGELES • HOUSTON • DIXON VALVE & COUPLING CO., LTD., TORONTO

ASSOCIATE COMPANIES—BUCK IRON COMPANY, INC., QUAKERTOWN, PA. • PRECISION DRAWN STEEL COMPANY, CAMDEN, N.J.



Proper  
Secretary  
that the  
and that  
and and  
ities of  
West

esper

e Art  
ul Ex-  
; and  
Co.,

iliate  
Petro.

clud-  
Petro-  
P. vs  
Gen-  
and  
But.  
Co.,  
mple-  
ors";  
Co.

con-  
June

il by  
July  
ppi.  
pple  
ana-  
neir  
unt-  
gas  
gas  
ad-  
in-

oon

ews

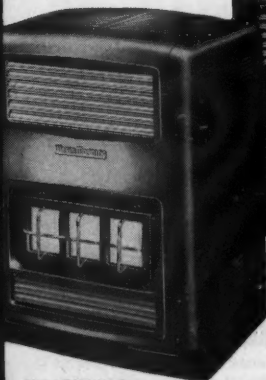
# WARM MORNING<sup>®</sup> is Fair-Traded and Nationally PRE-SOLD

## EXCLUSIVE WARM MORNING HEAT RAMP

Gets more heat from fuel ... increases efficiency ... improves circulation



New 385 Series  
85,000 BTU input



New 365 Series  
65,000 BTU input



New 65 Series  
65,000 BTU input



New 345 Series  
45,000 BTU input

New 3035  
35,000 BTU input

Now ... The Finest  
Gas-Fired Incinerator!



### Warm Morning<sup>®</sup> GAS INCINERATOR QUICK-BURNS BOTH TRASH AND WET GARBAGE

Full firebrick lined! Won't rust or burn out.  
Retails at only \$99.95. With automatic  
clock timer \$109.95 plus installation.  
Wire, write or phone for fair-  
traded dealership.

GI-543



# Selling WARM MORNING<sup>®</sup> Heaters is a Wonderful Business!

Write for full information  
on what WARM MORNING can do for you.

**LOCKE STOVE COMPANY • 114 West Eleventh St. • Kansas City, Mo.**

SEPTEMBER, 1954

115

## Safety Committee Meets, Discusses Program

LPGA safety committee met recently and discussed a marketer safety program designed to offer means for an adequate safety program to be put in the hands of every marketer, supplemented by National Safety Council posters, and bulletins by the LPGA safety committee.

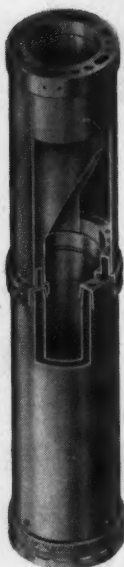
The meeting was presided over by R. H. Wherry, Gas Equipment Supply Co., Atlanta.

## AGA Plans for October Meet

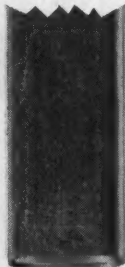
Basic plans have been made for the 36th annual convention of the American Gas Association, to be held in Atlantic City on Oct. 11-13.

Among the subjects presented to the general convention committee for final selection for the general sessions at the convention were regulation, legislation, future prospects of gas, supervisory training, increasing costs and possibly a panel discussion on pertinent topics.

If you install gas venting...  
**METALBESTOS**  
will save you money!



QC



WV

### EASY, FAST INSTALLATION

It doesn't take a crew to install Metalbestos — one man can easily handle the lightweight sections. Special couplers align pipe accurately, speed vent assembly. Adjustable fittings simplify installation problems, eliminate cutting and fitting.

### LESS DAMAGE AND WASTE

Metalbestos is an all-metal vent — it will not crack or break. The sturdy outer pipe resists damage during handling and installation, serves as a protective jacket for the inner aluminum "hot stack."

### FEWER SERVICE CALLS

You can install Metalbestos and forget it. Its double-wall, insulated design... permanently gastight joints... and sturdy, durable construction assures safe, dependable venting with no costly repairs or replacement.

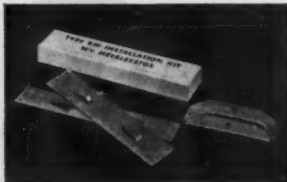
### A COMPLETE LINE OF TYPE B VENTS

Approved by Underwriters' Laboratories. Correctly designed for use with all approved gas appliances requiring Type B vents. (Not for use with oil-burning appliances or gas-fired incinerators.)

**QC METALBESTOS Round Vent** — for standard venting applications where space is not restricted.

**WV METALBESTOS Oval Vent** — specially designed for in-the-wall venting.

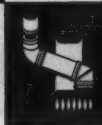
Complete line of fittings available for both round and oval vent systems.



### TYPE B-W INSTALLATION KIT

Simplifies venting of recessed wall heaters — fits inside 2 x 4 walls without furring out. Contains all fittings and directions needed to make safe, officially correct installation. Designed for use with WV Metalbestos pipe.

USE METALBESTOS FOR THE BEST JOB AT THE LOWEST COST  
Stocked by principal jobbers in large cities. Factory warehouses in Atlanta, Dallas, Philadelphia, Kansas City, Chicago, New Orleans.



**METALBESTOS** DIVISION  
WILLIAM WALLACE COMPANY • BELMONT, CALIF.



## CALENDAR

All associations are invited to send in dates of their forthcoming meetings for this calendar.

1954

### SEPTEMBER

**Sept. 10**—Pennsylvania LPGA. Annual convention, Penn Harris hotel, Harrisburg.

**Sept. 15-17**—National Petroleum Association. Annual meeting, Traymore hotel, Atlantic City, N. J.

**Sept. 17**—Natural Gasoline Association of America. Oklahoma regional meeting, Skirvin hotel, Oklahoma City.

**Sept. 19-21**—New Mexico LPGA. Convention, La Fonda Hotel, Santa Fe.

**Sept. 20-21**—Iowa LPGA. Convention, Savery hotel, Des Moines.

**Sept. 23-25**—Florida LPGA. Fall meeting, Tampa Terrace hotel, Tampa.

**Sept. 24-26**—Wisconsin LPGA. Fall meeting, Dell View hotel, Wisconsin Dells.

**Sept. 27-28**—Symposium on L. P. gas testing methods. Hotel Statler, St. Louis, Mo.

**Sept. 27-28**—Virginia LPGA. Annual convention, Hotel Roanoke, Roanoke.

### OCTOBER

**Oct. 11-13**—AGA. Convention, Atlantic City, N. J.

**Oct. 17-19**—Ohio LPGA. Annual convention, Neil House, Columbus.

**Oct. 18-19**—Kansas LPGA. Convention, Hotel Broadview, Wichita.

**Oct. 18-24**—National Safety Congress. Chicago.

**Oct. 24-26**—Oklahoma LPGA. Annual convention, Skirvin hotel, Oklahoma City.

**Oct. 29**—Natural Gasoline Association of America. Southern regional meeting, Blackstone hotel, Tyler, Texas.

### NOVEMBER

**Nov. 4-5**—Illinois LPGA. Fall convention, St. Nicholas Hotel, Springfield.

**Nov. 8-11**—American Petroleum Institute, Conrad Hilton hotel, Chicago.

**Nov. 15-17**—American Standards Association. Roosevelt hotel, New York.

## HERE'S HOW YOU SAVE WITH FORD TRIPLE ECONOMY



Point for point, Ford's new F-600 is the best buy in the 2-ton field. Choice of two new Low-Friction Short-Stroke engines—the 130-h.p. Power King V-8 and 138-h.p. Power King V-8 (used in comparison below).

Watch Out for Kids!

## You get more of the features you need most in a New FORD *TRIPLE ECONOMY* TRUCK!

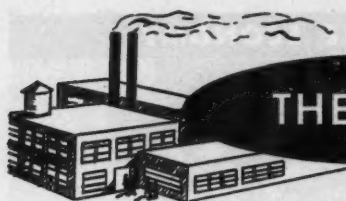
Here's proof. Your Ford Dealer can give you plenty more!

(Or write: Ford Division, Ford Motor Co., Dept. T-64, Box 658, Dearborn, Mich.)

FEATURE	FORD F-600	TRUCK C	TRUCK G	HOW YOU BENEFIT
<b>ENGINE</b>				<b>Greater concentration of power!</b> Ford offers more horsepower, for higher performance—and more horsepower per cubic inch of displacement, for gas-saving efficiency.
Max. Gross Horsepower.....	138	135	137	
Horsepower per cu. in.....	0.539	0.517	0.508	
Piston Stroke (in.).....	3.10	3.94	4.00	<b>The slower piston speeds of Ford's Short-Stroke design</b> cut piston travel, reduce wear, increase engine life.
Piston Speed ft. per min. (at 30 m.p.h.).....	903	1142	1160	<b>Free-turn valves with integral guides</b> let valves run cooler, last up to 50% longer.
Free-turn Intake and Exhaust Valves with Integral Guides..	YES	NO	NO	
<b>CAB</b>				<b>Ford's "visibility unlimited"</b> means greater truck-driving safety, ease and comfort for the driver.
Glass Area (sq. in.)				
Windshield.....	938	735	735	
Total Std. Cab.....	2103	1709	1709	<b>Only Ford</b> has these two driver-saving features—seat shock snubbers and woven plastic upholstery—that are tops for a smoother, cooler, more comfortable ride.
Seat Shock Snubbers.....	YES	NO	NO	<b>Ford has separate seat and seat back adjustments</b> ... a boon to big drivers as well as small.
Woven Plastic Upholstery.....	YES	NO	NO	
Seat Back				
Independently Adjustable....	YES	NO	NO	
<b>CHASSIS</b>				<b>Ford has the widest front tread</b> for greater stability.
Front Tread (in.).....	62.7	59.8	59.6	<b>Ford's extra long front and rear springs</b> give extra cushioning and maximum protection for truck and load.
Spring Length (in.) Front.....	45	40	45	
Rear.....	52	46	46	<b>Only Ford offers 3 transmissions</b> to fit truck...more exactly to varying conditions of road, load and speed.
Transmissions Available.....	4-speed 5-speed Dir. 5-speed O.D.	4-speed	4-speed 5-speed (Dir.)	

All chart information is based on latest data available as of 6-30-54 and is believed to be reliable but is not guaranteed.





## THE TRADE



**CITIES SERVICE OIL CO.** — The election of John T. McDowell as vice president and general manager of Cities Service Oil Co. Ltd. has been announced by S. B. Irelan of Bartlesville, Okla., president of Cities Serv-

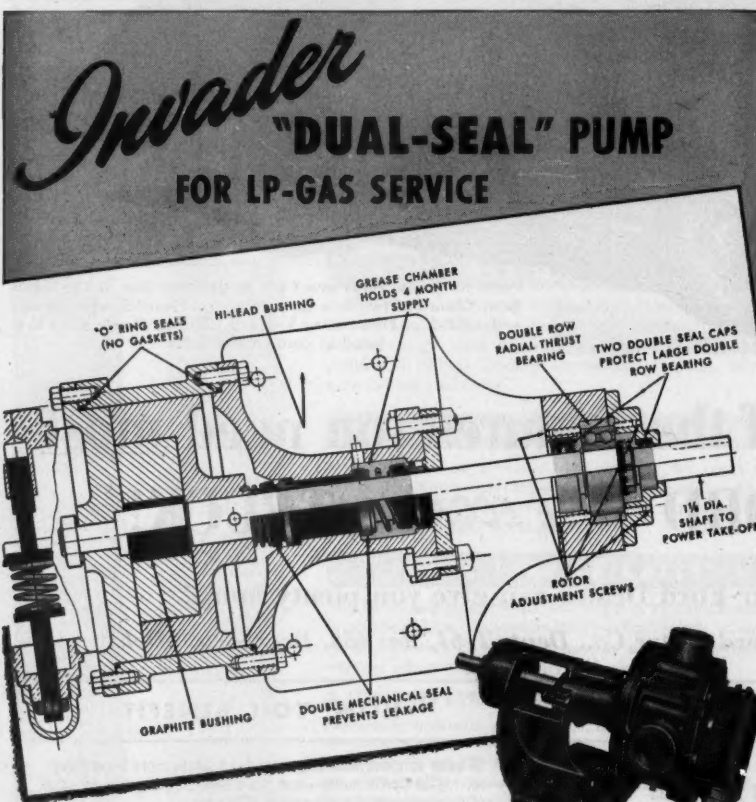
ice Oil Co. (Del.) and of its Canadian affiliate, Cities Service Oil Co. Ltd.

Together with E. D. Prentis of Toronto, vice president, treasurer and assistant general manager of the Canadian company, Mr. McDowell will

direct a program of marketing expansion and development in the Ontario and Quebec provinces of Canada. He will make his headquarters at company offices in Toronto.

The appointment of Harry F. Goold as regional marketing manager at Cleveland to succeed Mr. McDowell was announced by E. L. Stauffacher of Chicago, vice president and manager of Cities Service Oil Co.'s marketing division.

Mr. Goold, too, has been a long-time member of Cities Service's marketing group. He served as manager of marketing in Oklahoma and Ohio and in 1952 was named assistant regional manager of marketing at Cleveland.



### DOUBLE MECHANICAL SEAL PROTECTION FOR BEARINGS

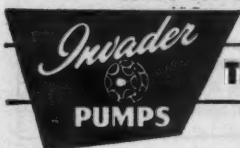
Look closely at the diagram above. See the many advanced engineering features in this new Invader pump!

Thanks to the double mechanical seal, these pumps can't leak. The bearings are protected against water and dirt, assuring long, trouble-free operation.

Mounted on your trucks or installed in your bulk plant, Invader LP-Gas pumps will give you the kind of service you have always wanted!

**HERE'S ANOTHER REASON**  
why Invader pumps perform better... longer. Improved, rounded tooth design assures less "down" time, fewer replacements.

**Write for Specifications, Dimensions and Prices**



**The SCHIRMER-DORNBIRER PUMP Co.**

1719 East 39th Street • Cleveland 14, Ohio

**RHEEM MANUFACTURING CO.** — The election of Lieutenant General

Albert C. Wedemeyer (USA, Ret.) as a vice president and director of Rheem Manufacturing Co. was announced recently by Richard S. Rheem, president.



**A. C. Wedemeyer**

Gen. Wedemeyer will assume his new responsibilities Sept. 1 and will make his headquarters at the company's New York executive offices at 477 Madison Ave.

Gen. Wedemeyer has resigned a similar post which he held since 1951 with Avco Manufacturing Corp. He joined Avco shortly after his retirement in 1951 upon completion of 32 years of military service during which time he won recognition as one of the nation's outstanding military strategists.

**SUPERIOR VALVE & FITTINGS CO.** — George R. Allen, vice president, Superior Valve & Fittings Co., Pittsburgh manufacturer of refrigeration, air conditioning and L. P. gas valves and fittings, has announced the appointment of T. E. Cunningham as Pittsburgh district manager.

Mr. Cunningham joined Superior in 1943 and was employed in the home office until 1945, at which time he was made assistant manager of the firm's Chicago sales office and warehouse. In 1941 he was recalled to the home office as assistant sales manager, a position he held until the present time.

Succeeding Mr. Cunningham as assistant manager is A. M. Eaches, who has been with the company in various sales capacities since 1945.

# Magic Chef

## 'triple-headed' program

advertising targeted at your  
best range prospects for

*more  
Magic Chef  
sales*

### "Wage-earner" market

Here's hard-selling national advertising targeted to reach this big new unsolicited market: more than 3,000,000 wage-earner families with today's greatest spendable income, today's greatest ability to buy. Two-page jump spreads in:



### "Food-shopper" market

Two-page jump spread of powerful feature-sell advertising in the TOP GROCERY-STORE MAGAZINE to reach more than 5,000,000 home-makers who are natural range prospects because they buy and cook their own food!



### Negro market

To get full national coverage of the important NEGRO MARKET Magic Chef is advertising in EBONY, which reaches more homes than any other Negro magazine.



MAGIC CHEF, INC.  
St. Louis 10, Mo.

in the big  
18 million range  
replacement  
market

during



**Magic Chef**  
**"Best-Buy" month**

At the same time Mr. Allen announced the appointment of Frank E. Davis Jr. as sales promotion manager. Mr. Davis previously had been an account executive with Bond & Starr Inc., Pittsburgh advertising agency.

J. W. (Chick) Overend, former Pittsburgh district manager, has opened his own L. P. gas dealership in Annapolis, Md.

**DETROIT-MICHIGAN STOVE CO.**  
—Fred A. Kaiser has succeeded John A. Fry as president of the Detroit-

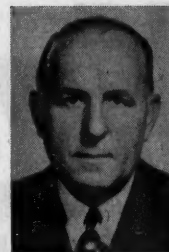
Michigan Stove Co. in a series of personnel changes.

Mr. Kaiser has been with the company for 22 years as executive vice president and in recent years has been in charge of sales.

Mr. Kaiser is executive vice president of the Institute of Cooking and Heating Appliance Manufacturers.

The DMS board of directors also elected Herbert J. Otter treasurer. Mr. Otter has been with the company a number of years.

The shifts resulted from the retirement of William T. Barbour as chair-



John A. Fry



Fred A. Kaiser

man of the board. Mr. Barbour, who spent 60 years with the firm, retired after an illness of several months. His son, Thomas E. Barbour, was elected to fill the board vacancy, and Mr. Fry, 50 years with the company and president since 1932, was elected board chairman.

**ROBERTSHAW-FULTON CONTROLS CO.**—Appointment of Rhea Shields as director of home economics for Robertshaw-Fulton Controls Co. is announced by John A. Robertshaw, president.



Rhea Shields

Miss Shields' duties will be to study consumer needs and to work with appliance manufacturers, dealers and distributors. She will assist Robertshaw-Fulton in maintaining the "consumer appeal" of their controls on home appliances that make for better living.

Miss Shields will make her headquarters at the company's new million dollar research center at Irwin, Pa.

**SERVEL INC.**—Increased volume of appliance sales in the New England states has made it necessary for Servel Inc. to double its sales representatives in that area, according to an announcement by Neal E. Schuman, field sales manager of the company's appliance division.

Servel's New England district has been divided into two smaller districts. Under the realignment of territory, the Boston district now includes Maine, New Hampshire and eastern Massachusetts. The New Haven district includes western Massachusetts, Vermont, Connecticut and Rhode Island.

John F. Myers of Braintree, Mass., will continue as sales manager for the Boston district.

W. Leinster Farmer of Noroton Heights, Conn., has been appointed sales manager for the New Haven district.

**"IN THE WEST  
IT'S BUEHLER"**



**LP-GAS**

**For the best TANKS  
For the best PRICE  
For the best SERVICE**

Quality and price, the two most important factors in the purchase of an LP-Gas plant, are yours at Buehlers. Large production schedules in our shop mean lower costs—lower prices. Close proximity to our customers means lower delivered cost. Remember **"IN THE WEST IT'S BUEHLER."**

**ANHYDROUS  
AMMONIA**



You'll be surprised to learn what we have for you in this new field—a complete line of Anhydrous Ammonia tanks. Ask your Buehler representative or write us for complete information.



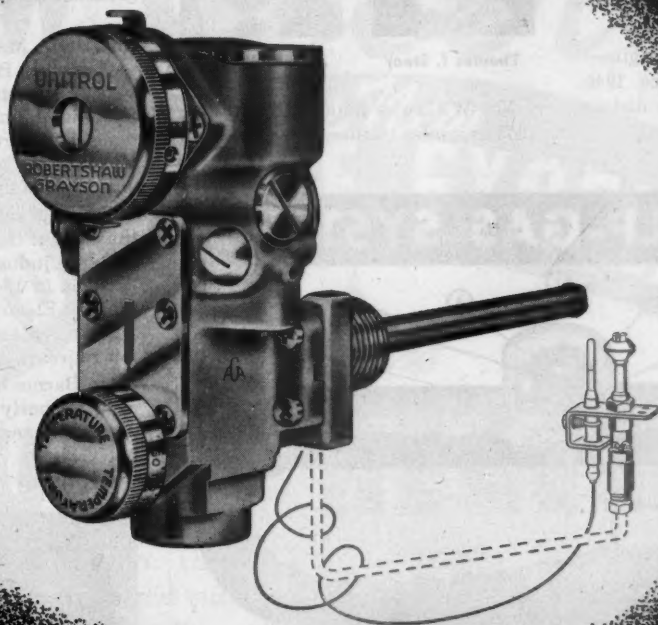
**THE NAME TO  
LOOK FOR ON AN  
LP-GAS PLANT**

**BUEHLER**

**TANK & WELDING WORKS**

5000 PACIFIC BLVD., LOS ANGELES 58, CALIFORNIA





## Puts the "Sell" in water heater Selection



### ROBERTSHAW-GRAYSON UNITROL®

You get added saleability and your customers get top operating performance with automatic water heaters equipped with UNITROL.

Robertshaw-Grayson's extensive national advertising has educated your prospects to accept the fact that the performance of a water heater depends upon the Control's performance... and that when the heater they buy is Robertshaw-Grayson controlled, they get the very best in quality performance.

Mechanically, Unitrol A is the finest water heater control of its kind. It's a completely integrated unit with main gas cock, thermo-magnetic 100% safety pilot, snap-action thermostat, pilot adjustment valve — all contained in one beautifully designed and machined housing.

Large pilot filter — all parts removable from front — removable without breaking water connections — water leaks cannot enter gas line, and vice versa — all parts impervious to gases and immune to corrosion.

*Select the control  
that helps you sell*

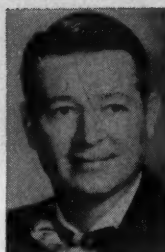


**Robertshaw-Fulton**  
CONTROLS COMPANY

ROBERTSHAW THERMOSTAT DIVISION, Youngwood, Pennsylvania  
GRAYSON CONTROLS DIVISION, Lynwood, California

**ROCKWELL MANUFACTURING CO.**—Jack H. Walters, Houston district sales manager of Rockwell Manufacturing Co.'s meter and valve division since 1951, has been named gas products manager for the entire division and will make his headquarters at the company's home office in Pittsburgh, according to Lloyd A. Dixon Jr., vice president.

Thomas I. Stacy, a sales engineer in the Houston district since 1940, will replace Mr. Walters as district manager.



Thomas I. Stacy



Jack H. Walters

Mr. Walters joined Rockwell in 1943 as a sales trainee in the Houston

office. From 1948 to 1951 he served as a sales engineer covering the Lake Charles, La., area.

Mr. Stacy joined Rockwell in 1938. After spending two years as a shop worker and serviceman at Rockwell's instrument division plant at Tulsa, he was promoted to sales engineer in the Houston district.

**SEQUOIA MANUFACTURING CO.**—Glenn A. Barnes has been advanced to general sales manager of Sequoia Manufacturing Co. by President H. R. Kramer. Mr. Barnes will headquarter at the company's main offices in San Carlos, Calif.

The new sales head is well known throughout the country's heating and building industries. Prior to joining Sequoia in 1949, he was manager of General Electric's Pacific region heating division and New York-Washington representative for Bechtel Corp.

Mr. Barnes has named John S. Padrick, formerly with Holly Manufacturing Co. and the Southern California Gas Co., to succeed himself in the southern sales post.



Glenn A. Barnes



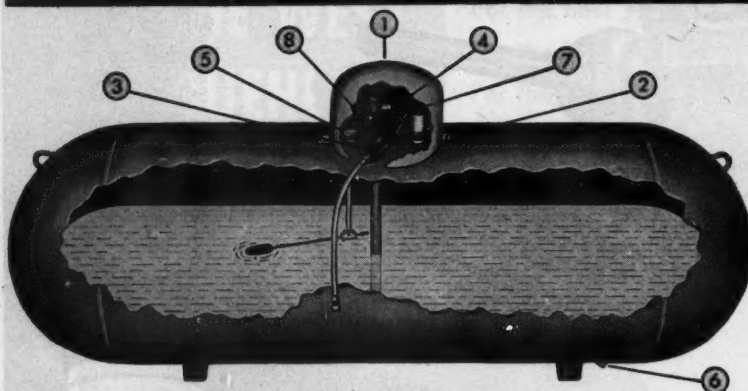
Robert G. Fox

**POND-JOHNSTON & CO.**—Robert G. Fox, formerly of Dallas, became sales manager of Pond-Johnston in mid-June and will sparkplug that company's expansion program in its southern operations, with headquarters in Mobile, Ala.

Mr. Fox has had much experience in the LPG field and anhydrous ammonia, as well, while southeastern representative of the Anchor Coupling Co., working out of that company's Dallas office. He has specialized in dealer problems and will now devote much time to working with the outlets of the company.

**CITIES SERVICE OIL CO.**—Election of William T. Cravens as vice president and director of Cities Service Oil Co. and manager of the refining division, is announced by S. B. Ireland, president of the company. He succeeds Lee N. Haugen, who has been elected vice president and general manager of the Cit-Con Oil Corp. at Lake Charles, La.

## Economy LP-GAS SYSTEMS



### Some of the many Features and Qualities of *Economy* Systems

- ① ONE PIECE STREAMLINE DOME!
- ② STURDY DETACHABLE HINGE!
- ③ LARGE ORFICE REGULATOR!
- ④ LIQUID TAKE-OFF, BUILT-IN EXCESS FLOW!
- ⑤ FLOAT GAUGE, REPLACEABLE SNAP-ON DIAL!
- ⑥ BOTTOM PLUG FOR LIQUID, OR CLEAN OUT!
- ⑦ LIQUID LEVEL OUTAGE GAUGE!
- ⑧ PRESSURE GAUGE OUTLET!

#### SEE US BEFORE YOU BUY!

Economy Truck Tanks, Transports, Skid Tanks, Anhydrous Ammonia Tanks and all types of Steel Fabrications.

## DALLAS TANK COMPANY, INC.

201-S W. Commerce Street • P. O. Box 5387  
DALLAS, TEXAS

# NEW Peerless



## The New STANDARD OF EXCELLENCE IN Gas UNIT HEATERS

A new concept in Unit Heaters—*new* inside and out. Stimulating styling that sells... plus more engineering achievements that surpass all others. Efficiency and rugged construction for the toughest heating task.

Top flight quality to suit even the most conservative buyer has established the name — Peerless — that has been counted on for dependability for 70 years.

**Styled for Beauty  
Built for Duty**

**FAN AND  
BLOWER TYPES**

**FIVE SIZES**

**IN EACH TYPE**

**60,000 BTU — 80,000 BTU**

**100,000 BTU — 150,000 BTU & 200,000 BTU**

**SEE YOUR DISTRIBUTOR  
TODAY OR WRITE US**

**PEERLESS MANUFACTURING CORP., — LOUISVILLE 10, KENTUCKY**





**SURFACE COMBUSTION CORP.**—Donald H. Clague, formerly sales representative in St. Louis for Janitrol division of Surface Combustion Corp., has been named branch manager of the Janitrol Dayton office. Mr. Clague's appointment was announced by Harry C. Gurney, Janitrol Division sales manager.

In his new post, he will direct all sales activity in the Dayton territory for the complete line of Janitrol winter and summer residential and commercial air conditioners and industrial space unit heaters.

**PREWAY INC.**—L. W. Shaw, vice president and director of sales of this Wisconsin Rapids, Wis., firm, has announced the promotion of C. H. Babcock, who has been service manager since 1936, to assistant director of sales.

At the same time it was announced by this manufacturer of home cooking and heating appliances that R. C. Babcock, son of the new assistant director of sales, will take over his father's former position as service manager.

R. C. Babcock has been associated

with Preway for a year and a half, joining the organization as assistant service manager.

**ANCHOR PETROLEUM CO.**—John D. Curtin recently joined the sales staff of the Tulsa office headquarters of Anchor Petroleum Co., according to W. A. (Bill) Baden, Anchor president.



John D. Curtin

Mr. Curtin's duties embrace negotiation of sales and buying contracts for refined petroleum products, liquefied petroleum gas, and natural gas.

Mr. Curtin was formerly associated with Texas Natural Gasoline Corp. in Tulsa.

**J. B. BEAIRD CO.**—C. E. Russell, who has been manager of the machining division, has been promoted to assistant works manager of the J. B. Beaird Co., Shreveport, C. N. Wicker, vice president and works manager, has announced.

Mr. Russell, who assumed his new position June 29, the anniversary of his first year with Beaird, will be in charge of all manufacturing departments, including machining, fabricating, stores control and maintenance.

**ACF INDUSTRIES INC.**—Charles J. Hardy Jr., president, ACF Industries Inc., announces the appointment of John W. Darr as director of public relations and advertising, effective immediately.



John W. Darr

Formerly in a similar capacity as vice president of Commercial Investment Trust Inc., and for many years in public relations, Mr. Darr has recently been with the public relations firm of Savage, Lee & Chase.

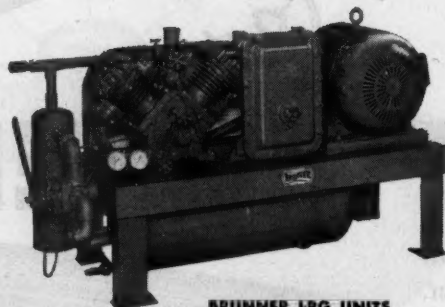
**BASTIAN-MORLEY CO. INC.**—F. G. (Jerry) Johnson has been appointed assistant sales manager of Bastian-Morley Co. Inc., La Porte, Ind., manufacturers of automatic water heaters and gas-fired boilers.

In addition to his sales duties, Mr. Johnson will work closely with heating jobbers, engineers and dealers.

## How much will YOU save?



...with a



**BRUNNER LPG UNITS**  
are available in 5, 7½ and 10 H.P. models — easy to install, easy to service.

### LP GAS TRANSFER UNIT

In bulk plants all over the country, operators report very sizeable gallonage savings with the use of Brunner LPG Transfer Units. The secret, of course, is that the Brunner Unit not only quickly transfers all liquid to the storage tank — but also removes and liquefies gas vapors in the tank car. With a simple turn of a valve, residual vapors in the tank car are removed down to recommended pressures of 15 to 20 lbs. per square inch. **PAYS FOR ITSELF . . .** the savings in time and gallons (up to 540 gallons from a 10,000-gallon tank car) soon pay for your Brunner Transfer Unit — keep on paying big dividends every time you use it.



**WRITE FOR FREE BOOKLET** that shows how to set up a highly efficient "tank car to storage" transfer system — describes the many safety and long life features found in Brunner LPG Units.

**BRUNNER MANUFACTURING COMPANY**  
Dept. E-94, UTICA, N.Y., U.S.A.

The Brunner Co., Gainesville, Ga.  
In Canada: Brunner Corp. (Canada) Ltd., Toronto, Ont.

**BRUNNER** ... the name to look for on  
**INDUSTRIAL GAS COMPRESSORS**

# AMERICAN *Better Bilt* TRANSPORTS

AMERICAN ENGINEERED LIGHT WEIGHT, LARGE CAPACITY, TRANSPORTS  
MEAN GREATER PROFITS...LESS OPERATING COSTS TO YOU

All American units are perfectly balanced and engineered for the truck chassis they are mounted on. Lighter in weight and incorporating many new safety features, they meet the needs of all dealers.

Perfect alignment assures easy pulling, greatly reduces wear and maintenance on truck and tires and provides maximum load capacity at minimum operating cost.



AA11—5500 W G extra light weight unskirted fender model. This unit is complete with crank-down landing gear and tire rack. Vapor and liquid outlets are manifolded in rear. Rotary gauges in side and rear assure accurate measurements under all conditions. Liquid line from manifold to front when desired.



AA7—5500 W G extra light weight full skirted model complete with crank-down landing gear and double tire rack. Rotary gauges side and rear. Liquid line from rear manifold to front of truck. Manifold is enclosed in rear, also hose and hose tube.



BB5—American's single axle non-skirted 4100 W G extra light weight twin barrel unit complete with double spare tire rack and crank-down landing gear. This unit may be purchased full skirted and has all the desirable features of above larger units.

ALL MAKES OF NEW TRUCK CHASSIS  
AVAILABLE AT LOWEST PRICES

FINANCING  
AVAILABLE  
Write for  
Information

PHONE Riverside 9183  
P.O. BOX 5525



**American Tank**  
&  
**Mfg. Co.**

2136 WEST COMMERCE, DALLAS, TEXAS

Also available at:

Jackson, Mississippi, P. O. Box 2563, Hi-way 80 East, Phone 3-8726

Littlefield, Texas, 306 N. Ripley, P.O. Box 341, Phone 228 MX

# Butane-Propane News

## LPG Industry Ties In With Plowing Contest

A dream farm kitchen—designed for attractiveness and step-saving efficiency—will be an eye-catching display for the promotion of L. P. gas appliances in the women's program at the national plowing contest in Olney, Ill. More than 12,000 farm women and a total of 150,000 farm people are expected to attend the better farming show, Sept. 16-18.

Recognizing its L. P. gas promotion possibilities, the Illinois LPGA sponsored industry participation in the big event, known formally as the National and Illinois Soil Conservation Field Day and Plow Matches. Association President Bennie Schnepfer, Blue Flame Gas Co., Olney, also obtained approval for the installation of L. P. gas appliances in the kitchen for the women's program.

Cooperating with the Illinois association, the National Council for LP-Gas Promotion originated and arranged the dream farm kitchen feature. Members of the women's staff of *Country Gentleman—Better Farming* magazine have designed it with a complete line-up of LPG appliances.

A table top water heater, incinerator, twin automatic clothes dryer and washer and icemaker refrigerator will be installed in the kitchen. Both a built-in and a free-standing range will be included so that automatic features of L. P. gas cooking can be demonstrated.



Members of the Illinois LPGA met recently in Olney, Ill., to plan the industry's participation in the national plowing contest. More than 150,000 farm people are expected for the better farming show, Sept. 16-18 in Olney.

Farm homemakers will see the L. P. gas dream farm kitchen in action in a series of demonstrations from the stage. Farm magazine editors, 4-H girls, University of Illinois home economists and television people will use it to bring new food preparation and household ideas to the farm ladies attending.

As a direct sales promotion tie-in with the kitchen, the Illinois association and manufacturers' representatives will man a 60- by 80-ft tent exhibit of L. P. gas appliances and equipment.

Farm visitors to the L. P. gas tent will be given a card-questionnaire with a numbered stub. This will become the holder's chance on a series of prize drawings sponsored by the industry. Awards will be the appliances in the dream farm kitchen, contributed by manufacturers. Consumer booklets and folders on L. P. gas tractors supplied by the National Council for LP-Gas Promotion will be distributed.

Names obtained from the questionnaire cards will be screened for a prospect list to be made available to members of the Illinois association and contributors to the national promotional program.

Twelve farmers cooperated with the project to provide 2000 acres for the educational program. Good land use, deep fertilization, tree planting, corn fertilization, fertilizer test plots and several forms of irrigation will all be demonstrated for visitors.

## General Controls Appears On Recent "Success Story"

Automatic controls that govern home appliances and make a housewife's job easier were the subject of a recent "Success Story" on KTTV, Channel 11.

General Controls Co., subject of the original "Success Story" telecast 3½



KTTV cameraman takes inside shots at Burbank, Calif., plant of General Controls Co. for "Success Story."

years ago, again was visited by the Richfield Oil Corp. weekly show. Site of the program was the Burbank, Calif., plant.

## Suburban Gas Has Record Year

Suburban Gas Service Inc. has reported for the fiscal year ended April 30 net profit of \$258,204, equal after preferred dividends to \$1.04 a share on the 238,800 shares of common stock outstanding, as compared with \$240,774, or \$1.17 a share on 185,245 shares, in the preceding year.

Sales and other revenues for the year aggregated \$2,442,436, as compared with \$1,969,139 for the preceding 12 months.

In his sixth annual report to stockholders, W. R. Sidenfaden, president, said the company is serving more customers, operating more marketing plants, and offering its services in more areas than any previous year in its history.

## Tropical Gas Acquires Esso L. P. gas Business

Tropical Gas Co. Inc. has acquired from Esso Standard Oil S. A. its liquefied petroleum gas business in the Caribbean area and Central America.

Tropical was organized by Gloré, Forgan & Co. for the purpose of acquiring these propane facilities, including bulk terminals in various



# INSTALLMENT SELLING

*Is the Backbone of Your Business*



## LPG CREDIT CORPORATION

*... offers the only complete financing plans designed especially to fit today's needs of the LP-Gas Industry*

**1—Retail Installment Financing** of sales to new customers. In one "package" the LPG Credit Corporation finances the appliances, the lease fee (when containers and systems are leased) or the sale price of the complete installation (when equipment is sold outright) and the initial sale of gas.

Today's retail selling practices require an "installment" program. National surveys prove that more than 80 per cent of all home appliances are sold on monthly payment terms. Our complete, low cost financing service has helped hundreds of dealers improve their sales volume... our specially designed plans can help you.

**Value Plus.** As part of its services, LPG Credit Corporation offers a merchandising policy and a complete advertising and sales promotion program as effective sales tools, including showroom display material, newspaper ad mats, radio spot announcements, and direct mail booklets.

*Our Financing Plans also cover three other basic problems*

**2—Floor Plan** for financing inventories of gas appliances and containers for resale.

**3—Financing of Cylinders and Tanks** leased to retail customers.

**4—Financing of Bulk Storage Tanks, Tank Trucks, and Transports.**



*Inquiry on your company letterhead is invited*

## LPG CREDIT CORPORATION

312 EAST 131ST STREET • CLEVELAND 8, OHIO

countries, which have been serving customers in Puerto Rico, Haiti, Dominican Republic, Jamaica, Bermuda, Panama, Costa Rica, El Salvador and Guatemala. Esso interests introduced L. P. gas for home and industrial use in the Caribbean area in 1948. The market has shown a steady expansion and is believed to have potential for a substantial further growth.

The transaction does not involve any public financing at this time.

Officers of the new company are Robert T. Haslam, president; Paul K. Thompson, vice president; James

Macrae, treasurer; Edward F. Clark Jr., secretary; and John C. Harned, assistant secretary.

### FTC Charges Warren With Unlawful Pricing

The Federal Trade Commission has charged Warren Petroleum Corp. with unlawful pricing practices in liquefied petroleum gas sales.

The FTC charges (1) that Warren has practiced price discrimination in its L. P. gas sales by granting special

price discounts to certain purchasers it classified as wholesalers but who are really retailers; and (2) that the company has sold L. P. gas at unreasonably low prices in Lake Village, Ark., in an effort to destroy competition.

Also involved in the first charge is Butane Wholesale Gas Co., Little Rock, Ark., and Zero LP Gas Co. of Lake Village. Warren owns 51% of the capital stock in Butane Wholesale which, in turn, operates Zero as a wholly owned subsidiary.

The companies were given time in which to file answers to the complaints. The first hearing, which was scheduled for Sept. 21 in Tulsa, may be postponed until later.

At the time the complaint was filed Warren issued the following statement: "G. L. Brennan, vice president of the Warren Petroleum Corp. in charge of the L. P. gas division, said he understood the complaint involved some of the more technical aspects of pricing of supplies to customers. He said the matter was in the hands of the corporation's lawyers and he did not know what action would be taken."

### Coleman Dealers Stress Air Conditioning Study

Proof that the home heating dealer is placing heavy emphasis on the potentialities of air conditioning in his business is forthcoming from the Coleman Co., Wichita, Kan. C. L. Burrows, sales vice president, reporting at the conclusion of the company's "Homecoming" dealer training program for 1954, said that more than 50% of this year's registrants chose the option of special training in

## ARE YOU PLANNING FOR GROWTH?

*If you are a manufacturer of LP  
gas equipment we can help you  
secure important growth*

If you are a manufacturer of LP gas equipment, First Acceptance Corporation offers you the aid of installment sales financing plans.

You can have the growth assistance of an FAC plan that will enable you to meet the increasing demands of present customers and secure valued new customers.

In considering an installment sales financing plan for your company, it is important to know that First Acceptance Corporation is thoroughly familiar with industry problems and now serves a number of the largest manufacturers in the LP gas equipment field.

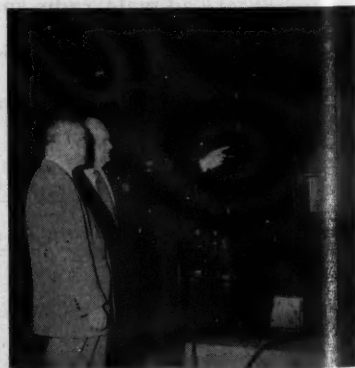
Because First Acceptance Corporation operates nationally, and is a pioneer in offering financial service to this industry, we are able to serve your immediate needs. Your inquiry will receive the prompt attention it merits.



FIRST ACCEPTANCE CORPORATION

Minneapolis, Minnesota • 820 Northwestern Bank Bldg. • Main 4451

*Discount Bankers Serving Manufacturers of LP Gas Equipment*



T. Kurai, president of Niigata-Worthington Ltd. of Japan, is shown the operation of a large centrifugal refrigeration compressor on test by S. Riley Williams, vice president of Worthington Corp., during Mr. Kurai's visit to the parent company's Harrison (N. J.) Works.

# NEW Anniversary SPECIALS

... STEAL EVERY SHOW!



TRAVELS HEAT FARTHER FASTER • QUIET • CLEAN

the  
AUTOMATIC  
5000

## WINTER AIR CONDITIONER

FULLY vented, enclosed. Automatic fan and temperature (Unitrol) controls. Heats from floor up, no ceiling waste, no chill blasts during warmup. Quiet, gentle, penetrating delivery via 16" fan, heatproof motor. Non-clog, castiron burner is silent on any gas. Combustion chamber has castiron header, long life. Heating section is gaslight, continuous-welded. Safety pilot and oil-weather Draft Diverter built-in. Summer switch for separate fan use. Readied for High Limit control, if required. Cabinet is Fiberglass-insulated, cooler to touch, centralizes heat for Living Zone delivery. Baked finish, Beige and Ivory, gold-bronze trim. Rated 50,000 btu ... for All Gases, heats room or apartment.

REMOTE CONTROLS (ELECTRIC) ALSO AVAILABLE



Handy  
SERVICE DOOR  
for  
LIGHTING  
REGULATING

FAN FORCED  
DELIVERY  
SAFETY PILOT  
THERMO-CONTROLS

HEATS  
CIRCULATES  
HUMIDIFIES  
FILTERS

NO SWEATING  
NO ODOR

FULLY  
AUTOMATIC



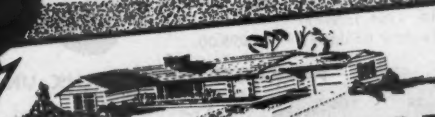
TIME SAVING  
CHASSIS

By releasing 4 wing nuts, cabinet can be lifted off, set aside, and "Plumb-Ease" Chassis alone coupled to gas line, unhampered. All tests, adjustments are completed before replacing cabinet. Installs in half usual time, minus confusion.

insulated  
'COOL CABINET'

Means it's cooler to touch, protects baby hands and furnishings, and more heat to Living Zone.

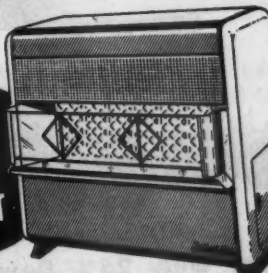
UNION-PAID  
FIBERGLAS



## the Ranchero CIRCULATOR

... Modern as It Is Mighty  
COMPACT is the word for this "Cool Cabinet" model. A powerful heatmaker with quick response ... radiates to floor, circulates into living zone. Non-clog, castiron burner ... balanced flame, silent on any gas. Set-lock air shutter, heavy-duty radiants, separate shutoff. Baked finish, Beige and Ivory, chrome trim. Two sizes, 15,000 and 30,000 btu.  
AUTO-CONTROLS AVAILABLE

QUICK  
2  
WAY  
HEAT



UNVENTED  
•  
ALL GASES



108th  
Year



**Brilliant Fine**

THE OHIO FOUNDRY & MANUFACTURING COMPANY  
'QUALITY HEATING SINCE 1846'  
STEUBENVILLE, OHIO

DEALER FRANCHISE  
OFFERS NEW MODELS, EXCLUSIVE FEATURES,  
BUDGET PRICES, TOP PROFIT, PROMPT  
DELIVERIES, GENEROUS AD-ALLOWANCES,  
COLORFUL STORE DISPLAYS, SELLING AIDS.

WIRE! WRITE! PHONE!  
FOR CATALOG, PRICES  
& NEAREST DISTRIBUTOR.



year-round air conditioning rather than heating alone.

Mr. Burrows said that the air conditioning classes were attended by a substantial number of dealers from northern states. He cited this as an encouraging sign that year-round air conditioning would be extensively and intelligently sold in what today is considered to be a secondary market.

## Gas Institute Holds Annual Dinner

The Gas Institute of Greater Miami

held its annual dinner recently with 75 in attendance. The institute is composed of 13 L. P. gas companies and two gas utility companies.

Retiring President Bill Chandler, general manager of Gas-Oil Products Inc., gave a resume of the institute's accomplishments for the past four years, citing James Fussell, managing director, for the conducting of a sustained advertising campaign and home show display.

Mr. Chandler gave his gavel to incoming President C. R. Vetter, vice president of Southeastern Gas Co., who pledged himself to carry on the

ideas that have so successfully sold gas in south Florida.

Joseph Garfield, president and general manager of Miami Bottled Gas Co., was elected vice president, while James Shatto, general manager of Dri-Gas Co., became the new treasurer. Sam Pallant, Florida Gas Co., was elected secretary.

## Universal Products Adds Fabricating Plant

Universal Products Inc., Houston, has announced the expansion of their plant, located at 6918 Lindberg. To be included is a new fabricating plant for propane, motor fuel, tractor and anhydrous ammonia tanks. The new shop is under the direction of B. C. Robinson Jr.

## General Gas Acquires Nine LPG Companies

In a major acquisition, General Gas Corp. of Baton Rouge has expanded its marketing area into Georgia, Alabama and South Carolina through the purchase of nine liquefied petroleum gas distribution companies.

Announcement of the acquisitions was made by Rawlston D. Phillips, president. He said that annual sales through the 27 bulk plants of the nine firms amount to more than 13½ million gal. of L. P. gas distributed to approximately 31,500 customers.

General Gas previously served 80,000 Louisiana and western Mississippi customers from 57 bulk plants.

General Gas is now planning for record sales of 60 million gal. of LPG during the calendar year, which started Aug. 1, a 30% increase over the company's best previous sales year.

**WE SAVE YOU MONEY!**

Saving customers money and giving interested attention to every customer problem built our business. Hardly a day ever passes without our receiving one or more letters from particularly satisfied customers. We get criticisms, too, but for the most part customers tell us we do a good job helping them. What may we do to help you?

One Good Reason for Buying  
The World's Finest  
Propane Delivery Units from  
WHITE RIVER DISTRIBUTORS

**MODEL 100**  
New 1954 Chevrolet 2-ton (Model 6403) 2-speed axle, with 1400 W.G. twin propane tank, piped complete—\$3,845.00. With 1954 International L.P.G. factory equipped—\$4,095.00.

**PACKAGED TRUCK TANK UNITS**

Prices include tank, piped complete, Viking KK-190 mechanical seal pump, 50" ¾" filler hose, clearance lights, tank painted, ready to use.

MODEL 100		
1400 W.G.	1600 W.G.	1800 W.G.
\$1755.00	\$1845.00	\$1960.00
Add \$150.00 for Model 200		
Add \$250.00 for Model 300		

We can furnish any make or model NEW TRUCK, including Ford, Chevrolet, GMC, Dodge or International (factory LPG equipped), and save you up to \$600.00 on a new truck.

Any make or model pump or meter can be supplied.

New 1954 2-ton Chevrolet, Model 6403, 2-speed, 825 x 20, 10 ply rear tires, \$2090.00.

Hose Reels — Fire Extinguishers  
LPG Carburation

**SEVERAL GOOD USED PROPANE TRUCKS FOR SALE**  
IMMEDIATE DELIVERY

**MODEL 200**

**MODEL 300**

**Pay Only 25% Down!**  
... the balance in 18 mos. at 5% interest!

We sell the steak... not the sizzle! Our Truck Tanks are built for us by Nor-Tex to our rigid specifications.

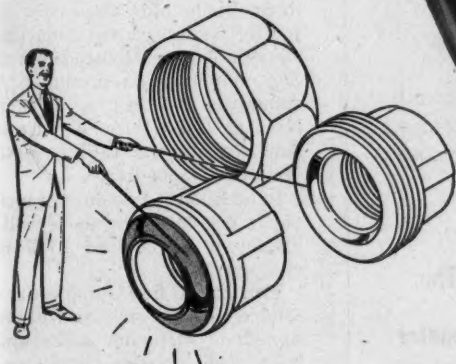
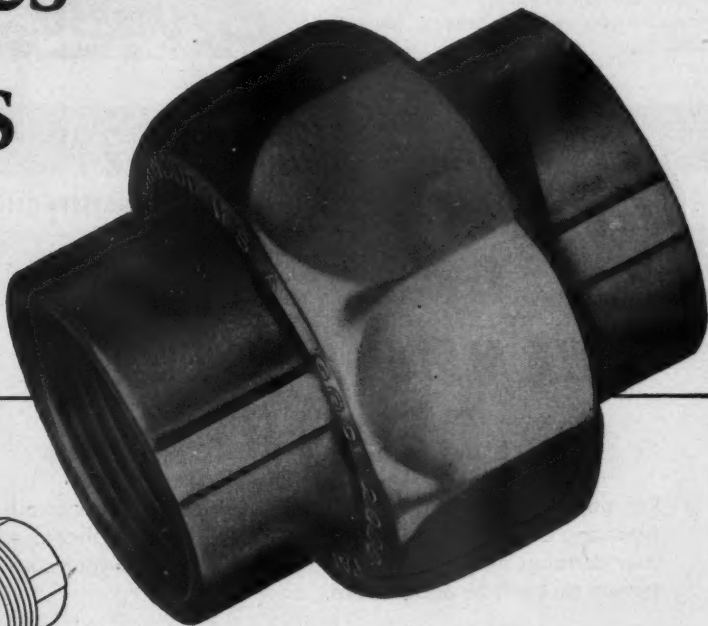
Call Preston W. Grace  
Phone 370 or 686

**"Upstairs, Downstairs, Everywhere"** reads the headline over the king-size background in the LP-Gas Information Service exhibit at the convention of the American Home Economics Association in San Francisco. More than 3000 home economists—high school and college teachers, home demonstration agents, magazine, radio and television editors—attended the show. Robert E. Borden, director of the information service, is shown explaining the cut-away drawing of domestic uses for L. P. gas.

WHITE RIVER DISTRIBUTORS, INC.

BATESVILLE, ARKANSAS

# Unique performance of new Rockwood Union #603 amazes users



*No galling in "making up"!*

"There's no other Union like it!" users tell us.  
And they're quite right.

No other Union has the hardness-differential that makes Rockwood's remarkable new Union #603 unique. *The male seat of this new Union is specially treated to give it a greater degree of hardness than the female seat.* Result: no galling in "making up" — longer service.

Users find that this hardness-differential, coupled with the many other Rockwood features, brings them Union performance unheard of before. They also praise these additional Rockwood advantages —

- ✓ exclusive cold forging process that results in higher resistance to tough working conditions
- ✓ absolutely interchangeable parts
- ✓ plug type ball-to-cone design that eliminates sharp corners or edges, does away with scratching when making up in tight places
- ✓ exclusive "Rockwoodizing" that protects entire Union, including threads, against corrosion

Both seats of the new Union #603 are made of corrosion-resistant AISI molychrome steel, forged in place and

bonded-locked under 100,000 and 400,000 pound pressure.

If you have not already started using this remarkable new Union, plan now to do so. For complete facts, mail coupon today.

**ROCKWOOD SPRINKLER COMPANY**  
WORCESTER 5, MASSACHUSETTS



ROCKWOOD SPRINKLER COMPANY  
409 Harlow Street  
Worcester 5, Mass.

Please send me prices and further data on the new Rockwood Union #603. I would also like the name of the nearest Rockwood distributor.

Name .....

Title .....

Company .....

City ..... Zone ..... State .....

## Conway to Warehouse John Wood Water Heaters

Art Conway, known in the plumbing field throughout the south through his long-time connection with John Wood Co., has completed arrangements to warehouse John Wood automatic gas water heaters in Florida, according to R. W. Simpson, vice president and general sales manager.

Mr. Conway will make John Wood water heaters available through the opening of new warehousing facilities.



Business, civic and military officials recently gathered for dedication of new research and development laboratory at Anaheim, Calif., division of Robertshaw-Fulton Controls Co. The new lab will be devoted to the development of "advanced, intricate and complex devices required by modern warefare."

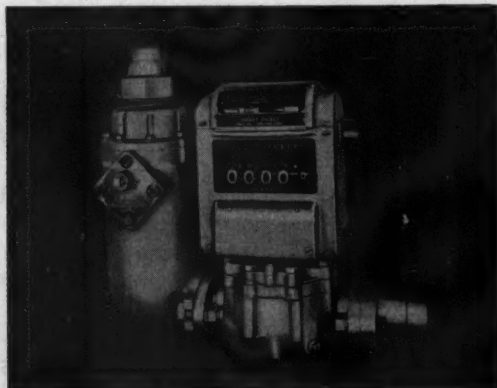


SERVICE • QUALITY • SATISFACTION

## THE METER YOU CAN ... DEPEND ON!

For many years Neptune has been the leader in meters of all types and any services. A product that will help you increase your earnings and enable you to render a service to your customers that will be appreciated.

1-1/4"  
size  
and  
2"  
size



The  
meter  
your  
trucks  
should  
have

Model 431—Direct Reading Reset Register. Model 433—Same type register but with Print-O-Meter and Totalizer. All models stocked in our warehouse and ready for immediate shipment. Order your meter today.

"EVERYTHING IN LPG AND ANHYDROUS AMMONIA"

## The Pasley Mfg. & Dist. Co.

301 East 11th Street • Kansas City, Mo. • Tel. Vinton 2244

## Symposium on Methods For Testing LPG

A symposium on methods for testing liquefied petroleum gases will be held Sept. 27-28 at the Statler hotel in St. Louis, Mo. The symposium is jointly sponsored by American Society of Testing Materials committee D-2 on petroleum products, ASTM committee D-3 on gaseous fuels, the Natural Gasoline Association of America, and the California Natural Gasoline Association.

In addition to two days of technical paper presentations there will be a display of specialized LPG testing equipment.

This is the first symposium of its kind dealing strictly with testing liquefied petroleum gases and has been made possible by the cooperation of the interested trade associations.

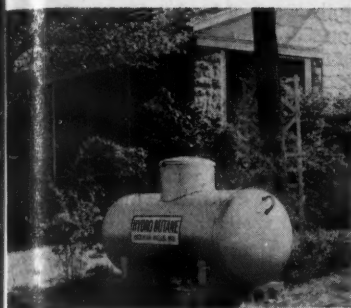
## Ashland Oil Holds Dealers' Meetings

Ashland Oil & Refining Co., Ashland, Ky., held the first annual meeting of its bottled gas dealers in two sections recently, one in Ashland and the other in Lexington. Dealers and service men came from Kentucky, Ohio and West Virginia, approximately 150 strong, to be briefed by representatives of four of Ashland's suppliers on sales matters, safety and service.

E. Jack Lee of the marketing division opened the meeting in Ashland by introducing Everett F. Wells, executive vice president, who welcomed the dealers and the suppliers' representatives.

George Strode of Empire Stove Co.

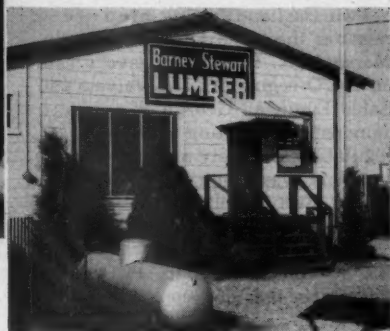




**FOR HOME...**



**...OR FARM...**

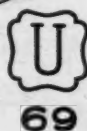


**...OR COMMERCIAL INSTALLATIONS**



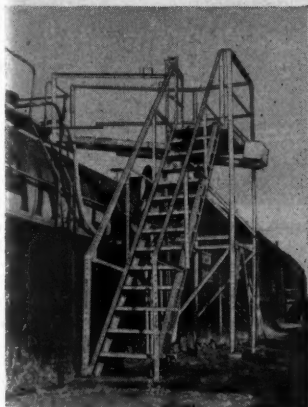
## They Fit Right Into Your Sales Picture

Everywhere you look, you'll find a ready-made market for BS&B Propane Systems...and you'll find these quality-built propane systems give you selling points that assure your customers years of trouble-free service! They're tested and inspected thoroughly, all during manufacture. For fast sales, easy installation and positive customer satisfaction, sell BS&B "Perfection" Propane Systems!



### BS&B Unloading Rack

Stop awkward unloading...minimize fire danger! New BS&B Unloading Rack makes walking sure and easy. Needs only small space, has ladder or stairway on left side, right side or front as you order. Loading drop folds out of way. Shipped knocked down, cut and marked for easy erection.



**BLACK, SIVALLS & BRYSON, INC.**

Propane Equipment Division, Dept. 6-AB9

7500 East 12th Street Kansas City 26, Missouri



explained the operation of the Empire floor furnace.

Two Bastian-Blessing men were next on the program. District Sales Manager W. H. Harper gave a talk on RegO regulators and valves, and Sales Engineer George Workman demonstrated testing and repairing regulators. A safety and fire prevention talk was given by Mr. Harper.

Max Fetty, Delta Tank Co., discussed "More Gas." The program included a film and talk on water heaters by Ken O'Gorman, Pittsburgh, Pa., and a talk and cooking demon-

stration by Carl Sorby of Roper Corp.

The meeting which followed at Lexington was a repetition of the Ashland meeting except that Ashland's Jim Snyder delivered the welcoming address.

### Foreign Manufacturers To Visit Temco Plant

Foreign Operations Administration of the Federal government has announced that Temco Inc., Nashville, Tenn., has been selected as one of the American plants to be visited by for-

eign manufacturers of heating and cooking appliances. Temco will be host to the group early in the fall.

The principal goals of the visit, a government official states, will be to study ways of lowering cost of appliances to consumers abroad through more efficient production and distribution practices. The visiting management personnel of European firms will study the manufacturing and distributing techniques of several American companies with the object of learning methods which they can adapt to their own operations.

### National Council Appoints New Agency

National Council for LP-Gas Promotion, Chicago, has appointed McCann-Erickson Inc. to handle its advertising, James E. Pew, president, has announced.

The new agency was selected by the council's executive committee, headed by Kenneth R. D. Wolfe, vice president, Fisher Governor Co., Marshalltown, Iowa, following earlier screening by its copy committee and staff.

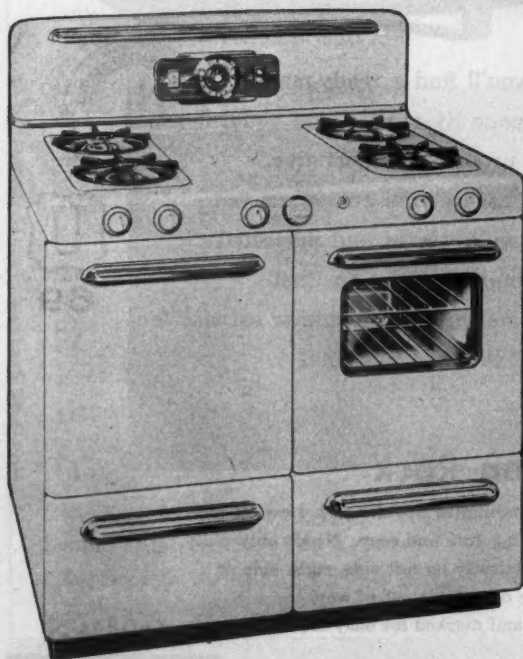
The first ads produced by the new agency will appear early in 1955. The last insertions prepared by the former agency are scheduled for national, regional and state magazines in October, November and December of this year.

### United Petroleum Opens Tank Plant

A completely new and modern plant for the manufacture of "Topper" L. P. gas systems has just been put into operation in New London,

# Enterprise

mark it up more...  
still sell it for less...  
**THAN ANY COMPARABLE  
RANGE**



YOU GET A BIGGER MARK-UP on this Enterprise deluxe 38" CP automatic gas range than you get on any comparable range... yet you still sell it for less!!

COMPARE THESE FEATURES with anybody's. Full automatic... clock-controlled oven and appliance outlet... waist-high broiler... double-glass sweat-proof oven window... lifetime guaranteed top burners... lifetime porcelain enamel, inside and out... one-piece welded chassis... non-glare cooktop lighting!!

CONTROL YOUR OWN MARK-UP... give yourself plenty of room for trading... offer "big name" value for a lot less money... with ENTERPRISE!!



WRITE TODAY FOR FULL INFORMATION

Serving a value-conscious America for nearly 100 years

**PHILLIPS & BUTTORFF MANUFACTURING COMPANY**  
NASHVILLE, TENNESSEE



To expedite shipment of Garland gas ranges and commercial cooking equipment to the expanding Canadian market, Detroit-Michigan Stove Co. and its Toronto distributor, Garland-Blodgett Ltd., have put into service a fleet of overland trucks. The 20-ton "Paul Bunyan" stove in the background was built by Detroit-Michigan for the Chicago World's Fair of 1894.

IT SAYS **LOOK OUT**



• • • WITH AUTHORITY AND SAFETY

As a leakage warning for natural or liquefied petroleum gas, Mallinckrodt Ethyl Mercaptan Purified gives you many advantages:

- **SAFE**—Its penetrating, skunk-like odor commands instant attention, but will not cause nausea or irritate eyes or mucous membranes.
- **ECONOMICAL**—So powerful, one pound will odorize 1,000,000 cubic feet of natural gas or a 10,000 gallon tank car of Propane or Butane.
- **PROTECTS FIXTURES**—Continuous rigid checks insure such moisture-free purity that Mallinckrodt Ethyl Mercaptan does not damage valves, gauges, etc.

**MALLINCKRODT  
ETHYL MERCAPTAN PURIFIED**

{ meets all 15 qualifications of National  
Bureau of Standards

May we send you Data Sheet X99...or a trial order?

*Mallinckrodt®*

**MALLINCKRODT CHEMICAL WORKS**

Mallinckrodt St., St. Louis 7, Mo. 72 Gold St., New York 8, N. Y.  
CHICAGO • CINCINNATI • CLEVELAND • LOS ANGELES • MONTREAL • PHILADELPHIA • SAN FRANCISCO  
Manufacturers of Medicinal, Photographic, Analytical and Industrial Fine Chemicals



Minn. Operated by Steel Tanks Inc., it will fabricate 115-, 500- and 1000-gal. L. P. gas storage systems exclusively for the United Petroleum Gas Co. of Minneapolis.

### **Squibb-Taylor Appoints Meeder Representative**

Squibb-Taylor, Dallas, has appointed Meeder Equipment Co., Los Angeles, as western states factory representative. Meeder will handle Taylor's liquid level gauges and anhydrous ammonia valves and fittings.

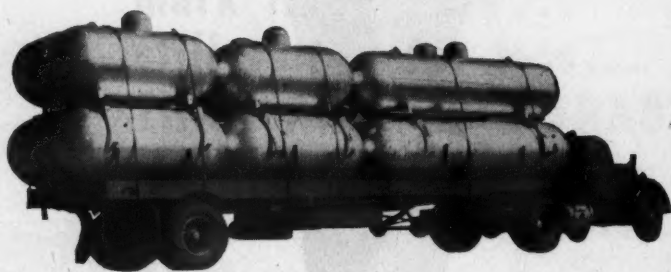
### **Louisiana Kills Bill To Regulate Butane**

The Louisiana Senate recently killed a proposal to put butane dealers under regulation of the Louisiana Public Service Commission.

Sen. James Hinton, author of the bill, urged senators to "think about the 150,000 butane consumers and forget about the 800 dealers."

His bill was defeated 29-6. An amendment that would have excluded fuel oil and kerosene from provisions of the bill was also defeated 21-10.

## **MORE SAFE PAYLOAD PER POUND**



## **DOMESTIC TANKS**

**FOR PICK-UP, TRAILER OR CARLOAD**

- LIGHT WEIGHT      • LOW COST
- ASME U69      TO MEET ALL  
STATE AND FEDERAL REQUIREMENTS

WRITE FOR FURTHER INFORMATION AND PRICES

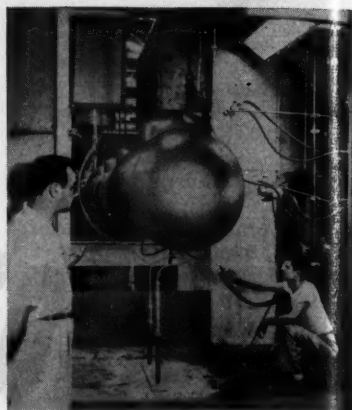
**BAGWELL-GENERAL**

Write  
P. O.  
Box 391

**STEEL CO.**

**SAPULPA, OKLAHOMA**

Telephone  
Sapulpa 2680  
Tulsa 50-8500



Electrostatic painting saves time and materials for J. B. Beaird Co. Painting chambers are some of the first to be installed in the southwest.

### **Electrostatic Painting Speeds Beaird Production**

An electrostatic painting process is increasing production of L. P. gas systems and anhydrous ammonia equipment at the J. B. Beaird Co., Shreveport, La.

The latest development in scientific painting, the electrostatic painting chambers at Beaird are one of the first to be installed in the southwest.

Credited with applying a more attractive and durable finish, the new painting process also effects a considerable saving in time and materials, according to Beaird officials.

### **A. O. Smith Corp. Appoints New Agencies**

A. O. Smith Corp., Milwaukee, has announced the appointment of two new advertising agencies.

Cramer-Krasselt Co., Milwaukee, will handle the consumer and trade programs of the Permaglas division, while Klau-Van Pietersom-Dunlap Inc., Milwaukee, will handle the farm, industrial, export and corporate programs.

### **Worthington Acquires Mueller Furnace**

Hobart C. Ramsey, president of Worthington Corp., and Harold P. Mueller Sr., president of Mueller Climatrol Division, have announced completion of the acquisition of Mueller Furnace. The stockholders of Mueller previously approved the sale of the company's name, assets and good will to Worthington, in exchange for Worthington common stock.

# ENLARGE YOUR REVENUE PICTURE

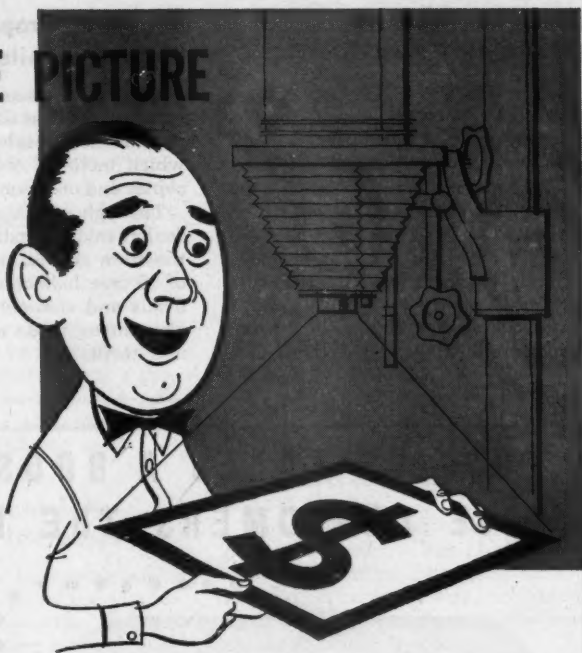
## Develop the Commercial Gas Market with RUUD GAS Water Heaters

Brighten your revenue picture by *full* exploitation of the tremendous load-building possibilities in the commercial gas water heating market. It's a big market—loaded with many opportunities. And, naturally, the revenue-per-application is greater.

Ruud is experienced in working with gas companies to help develop commercial gas water heating programs. We will be glad to help you survey commercial potential in your area. Then we will assist you in working out a definite commercial gas water heating promotion program. Our engineering services will also be available.

### JUST LOOK AT THESE UNLIMITED POSSIBILITIES:

Restaurants . . . Schools . . . Apartment Houses . . . Multiple Housing . . . Industrial Cafeterias . . . Industrial Washrooms . . . Motels . . . Small Hotels . . . Institutions . . . Car Washes . . . Trailer Parks . . . Beauty Shops . . . Laundries . . . and many more



### RUST-PROOF MONEL . . . the high nickel, lifetime metal

. . . safely holds water at 180°! Will not rust, ever. Ruud-Monel Sanimaster, with its exclusive, long-life Monel tank, provides sparkling clear hot water for years and years.

### IT'S EXPANDABLE, TOO—NEEDED UNIT, OR UNITS, CAN BE INSTALLED NOW AND THEN ADDITIONAL UNITS CAN BE CONNECTED LATER, IF NEEDS INCREASE

And Sanimaster is self-contained, compact and space-saving—you need no external or auxiliary storage tank.

### WHATEVER THE MARKET, RUUD HAS THE RIGHT WATER HEATER FOR IT!



**180° SANITIZING HOT WATER** is piped directly into laundry and dishwashing machines. Gives positive bacteria destruction, perfect sanitation.

**140° GENERAL-USE HOT WATER** is piped to pot sinks, lavatory sinks and other regular-use hot water faucets. Both temperatures from the same tank at the same time!

**FOR COMPLETE DETAILS  
OF THIS COMMERCIAL GAS  
PROGRAM WRITE OR**

*Mail this Coupon Today!*

## RUUD-MONEL *two temp* SANIMASTER

**RUUD MANUFACTURING COMPANY,**  
Dept. C-4, 2934 Smallman Street, Pittsburgh 1, Pa.  
Please send complete details on Commercial Gas Water Heater Program.

Name \_\_\_\_\_ Title \_\_\_\_\_  
Company \_\_\_\_\_  
Street Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

## Ideal Gas Constructs New Bulk Plant

Ideal Gas Co. of Denver has announced that construction is under way on its new \$35,000 propane bulk plant near Los Animas, Colo.

The announcement was made by Alfred Drayton, Los Animas and LaJunta representative for Ideal Gas.

Work began in mid-June on the new bulk plant, which will remove serious storage and handling problems from Ideal Gas Co.'s operations.

## Suburban Propane Uses 'Copter Mobile Display

Seven appliance dealers of Suburban Propane Gas Corp. were the center of a two-day sales promotion stunt which included the company's helicopter and one mobile display van.

Through previous advertising, the dealers invited customers to drop into the store and fill out a card for one of 10 free helicopter rides. City officials and community leaders were also among those to experience this new thrill.

"This is the first demonstration of Suburban's 'Copter-Mobile display dealer aid program," said S. J. Mc. Lagan, sales promotion manager. "Our present plans include similar events at several of the company's other 84 district plants."

## Indiana Law Governs Filling of Containers

According to information from the board of directors of the Indiana LPGA, an Indiana law makes it unlawful "to fill, sell, disburse or 'traffic' in containers by other than the owner, or without the consent of the owner."

The law provides for the registration of the mark or symbol that is to be placed on the container. Use by other than the person whose name or symbol appears on the container is presumptive evidence of unlawful use.

The law further provides for the issuance of a search warrant if there is reason to believe that another person has possession of or is using your containers.

## Magic Chef Closes Lorain Factory

Magic Chef Inc. recently announced the closing of its 61-year-old Lorain, Ohio, factory and the consolidation of this production with the St. Louis division.

George P. Eichelsbach Jr., vice president in charge of manufacturing, made the announcement to employees and union representatives.

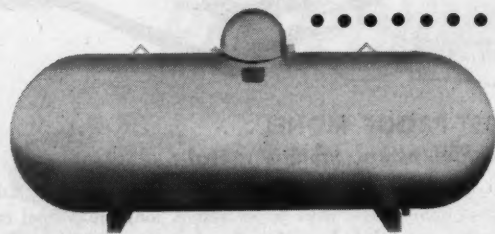
According to Mr. Eichelsbach, the Lorain closing is a decision of the board of directors in the interest of overall manufacturing efficiency. The plant, oldest of three in operation, has been producing the company's complete line of gas and oil space heaters and oil cook stoves.

## Gas Industry to Spend \$3.9 Billion for Expansion

During the four years, 1954-1957, total new construction expenditures by the gas utility and pipeline industry will aggregate \$3.9 billion, the American Gas Association reports. This compares with actual expenditures of about \$5.08 billion on the expansion program of the industry in the 1950-1953 period.

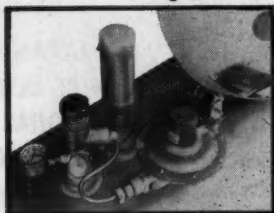
Expenditures of the industry in 1953 for new facilities aggregated \$1.35 billion, the second highest total in gas industry history. Last year was the fourth consecutive year in which new construction expenditures exceeded \$1 billion.

**TO GIVE SALES A BOOST...  
GIVE CUSTOMERS THE BEST!**



## FLINT LPG SYSTEMS

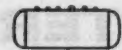
New control fittings make FLINT systems easier to install, easier to fill — Easier to Sell.



The High quality construction of FLINT tanks, plus the convenience and reliability of these new control fittings, make FLINT your best "sell" in LPG systems. Heavy angle legs have large bearing surface to prevent rocking or rolling; will not let tank skid or crawl off foundation. Every tank is built in accordance with ASME code for 250 lbs. working pressure and tested to 375 lbs. psi. — Meet all state requirements.

Six sizes, from 120 to 1,000 gallons. Bulk storage tanks in 6,000, 8,000, 10,000, 12,000, 18,000 or 30,000 gallon sizes.

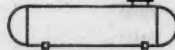
*Anhydrous Ammonia Tanks in the following sizes also available.*



**APPLICATOR TANKS**  
100 gal. 157 gal.  
200 gal. 236 gal.  
310 gal. 500 gal.



**FARM SERVICE TANKS**  
500 gal. 1000 gal.  
in 28" - 41" and  
46" diameter



**BULK STORAGE TANK**  
6000 gal.  
10,000 gal.  
30,000 gal.

**BUILT BETTER . . . TO SELL BETTER**

**FLINT STEEL CORPORATION**

MEMPHIS, TENNESSEE

• TULSA, OKLAHOMA



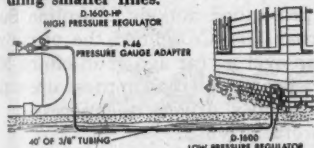
# The Case Favoring Two Stage Regulation



by  
**GEORGE R.  
POSTLEWAIT**  
General Manager  
SELWYN-PACIFIC  
COMPANY

There are so many advantages to be gained from two-stage regulation that the question is not "Can I afford it?" but "Can I afford to be without it?" With the advent of new and improved SEL-PAC large capacity high pressure regulators, inexpensively priced, there are cases when it becomes more costly to use single stage regulation.

Consider these advantages with two-stage regulation: freeze-ups are greatly reduced as much larger orifices can be used than with single stage. Expansion of gas takes place at two different points with less expansion at each point and more surface area to provide heat. Much smaller lines can be used in piping from the tank to the house resulting in savings in cost of pipe, tubing and fittings plus ease of handling smaller lines.



Two-stage regulation eliminates fluctuating delivery pressures experienced in single stage regulation caused by differences in summer and winter storage tank pressures. Higher efficiency for customer as orifice pressure remains constant at 11" water column pressure. This means fewer service calls for pilot and burner adjustments due to fluctuating pressures. Furthermore, the second stage regulator can be installed inside the building which is often advantageous.

The pressure in an ordinary propane tank may vary from 225 pounds per square inch on a hot summer day to 10 or 15 pounds on a cold winter day when under a heavy load. This means that a single stage regulator may have variations in inlet pressure of 200 pounds or more. This may result in differences in delivery pressure ranging from 13 to 14" water column pressure in the summer to 8 or 9" in the winter, a fluctuation of 3 to 4 inches.

With SEL-PAC two-stage regulation the high pressure regulator acts as a shock absorber. A regulator which may be set at a delivery pressure of 10 p.s.i. may climb as high as 11 p.s.i. on a cold winter day. This means that the inlet pressure to the final stage regulator will vary only 2 or 3 pounds maximum as opposed to a variation of over 200 pounds as in the case of the single stage. Small variation in inlet pressure of only 2 to 3 pounds does not affect the outlet pressure of the second stage regulator.

Write us for the complete story of two-stage regulation. We will gladly send you charts, diagrams, tables, etc., of help to the installation and service man—no charge or obligation whatever.

**SELWYN-PACIFIC COMPANY**  
340 West Avenue 26  
Los Angeles 31, California

## Rheem Promotes "Rocket Man"

Rheem Manufacturing Co., taking advantage of the fact that its name and water heater models are used in the movie, "The Rocket Man," has built a promotion campaign around the movie. Starring Charles Coburn, the film deals with a plumber.

The program emphasizes the public services performed by the plumbing industry as a whole, so that the whole industry can tie in with the promotion. Posters were prepared for all plumbing contractors and a promotional kit containing news and feature stories for placement with local newspapers is being used.

## New Plant Opened As Fuel Demand Increases

In answer to the increasing public demand for propane in the Halifax area, Halifax Propane Gas Ltd. has opened a new bottling plant at Waverly Station, near Halifax, N. S., Canada. The plant has a 30,000-gal. storage tank into which the gas is pumped from railway tank cars.

Leo Horne is local manager of the firm and William B. Firmer is service engineer and supervisor of the firm and its affiliate companies.

## RCA To Push New Range Line

The new RCA Estate line of both 40-in. and 30-in. ranges will be unveiled to consumers with a group of

national ads in September, spearheaded by a two-page color spread in *Life*. This insertion will be supported by ads in *Better Homes and Gardens*, *McCall's*, *Good Housekeeping*, and *Farm Journal*, totaling more than 20 million ad impressions appearing in a single week.

The campaign will be sustained with repeat appearances in these magazines, appearing through December.

## International Harvester To Sponsor TV Show

International Harvester Co. will sponsor "The Halls of Ivy," marking Ronald Colman's television debut. The series of half-hour programs will start in October.

The sponsor will advertise the company and its entire line of products, with major emphasis on refrigeration and motor trucks, it was announced by M. F. Peckels, manager of the consumer relations department.

## Servel Centralizes West Coast Operations

All West Coast operations of Servel Inc., Evansville, Ind., have been centralized in a new Los Angeles location at 5545 East Slauson Ave., Seward Abbott, regional manager, announced recently.

The new address will provide both office space and warehousing facilities for the company's appliance division, air conditioning division, and commercial refrigeration division.



Employees of Pacific Refiners Ltd. and the Honolulu Gas Co. add the finishing touches to a model of Pacific Refiners' plant on Oahu. The model was built to scale by the Fluor Corp. and displayed in the window of the Home Insurance Co. in Honolulu.

## St. Paul Hydraulic Moves to Mattoon

St. Paul Hydraulic Hoist has announced the complete move of its sales and service functions, covering both domestic and export activities, to its new expanded plant site in Mattoon, Ill.

St. Paul transferred its manufacturing operations from Minneapolis to a modern plant with improved facilities in Mattoon last winter. Sales and service remained at the old plant site in Minneapolis until June 1 to facilitate operations during the move.

## Six Truck Drivers Win Safety Award

Congratulations to George B. Sheppard, president of the Carolina Suburban Gas Co., and his six award-winning drivers! Every time LPG is linked with safety in the eyes of the public the industry's public relations effort gets a helping hand.

Certificates and lapel buttons, emblematic of the National Safety Council award, were presented to the six winners at a banquet given in their honor at Blazer's lodge on Lake Greenwood, S. C. Presentations were



**National Safety Council awards** being made to six truck drivers of Carolina Suburban Gas Co., Laurens, S. C., by the company president, George B. Sheppard, independent Rulene Gas Dealer since 1934. The drivers are, front row, left to right: Charles G. Strickland Jr., Thomas W. Campbell, Kenneth Elledge; back row, left to right: Clyde C. Taylor, S. Berry Hill, Ernest Porter, Mr. Sheppard.

# WHO is Harry Kehrler?

*\** (pronounced care)



The man who suggests you **EXCHANGE** that old Corken Packed Pump for one with a Mechanical Seal, Guaranteed Not To Leak—You won't be out of a pump—Get the **EXCHANGE** Pump installed, then return your old pump.

**ASK THE HUNDREDS WHO HAVE DONE IT IF IT ISN'T A WONDERFUL DEAL.**

# CORKEN'S

208 E. Grand Oklahoma City, Okla. RE 6-6518  
EASTERN OFFICE 918 PUTNAM AVE. PLAINFIELD, N. J. PHONE PL 7-1305  
DISTRIBUTORS IN PRINCIPAL CITIES

made by Mr. Sheppard, one of the first dealers in bottled gas in the southeast.

The National Safety Council, which is a federally chartered organization, keeps a record of drivers submitted by its members and makes the awards to those drivers who attain a prescribed ranking. Carolina Suburban Gas Co. joined the organization over a year ago in an effort, Mr. Sheppard stated, to impress upon the company's drivers the necessity of careful driving.

## Robertshaw-Fulton Acquires Toronto Plant

Robertshaw-Fulton Controls Ltd. (Canada) has acquired a manufacturing plant in the Toronto area on a long term lease, and will start operations soon.

The new company will assemble and manufacture thermostatic controls for Canadian customers in the kitchen range, water heater and space heater fields.

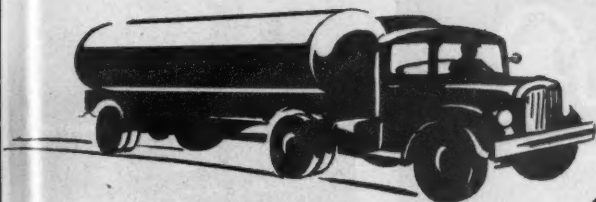
The decision to undertake manufacture of certain of the Robertshaw-Fulton products in Canada was dictated by the expanding needs of Canadian industry, company officials in Toronto said.

## Newman's Establishes New Office, Warehouse

Newman's Inc., a valves and fittings house, has established a new general office and warehouse in Tulsa.

Jay Newman, president, announced that the new building includes 2000 sq ft of office space and 10,000 sq ft of warehouse space. An additional 25,000 sq ft is in the old warehouse building at the same site.

The new addition was built dock high to facilitate truck loading and unloading.

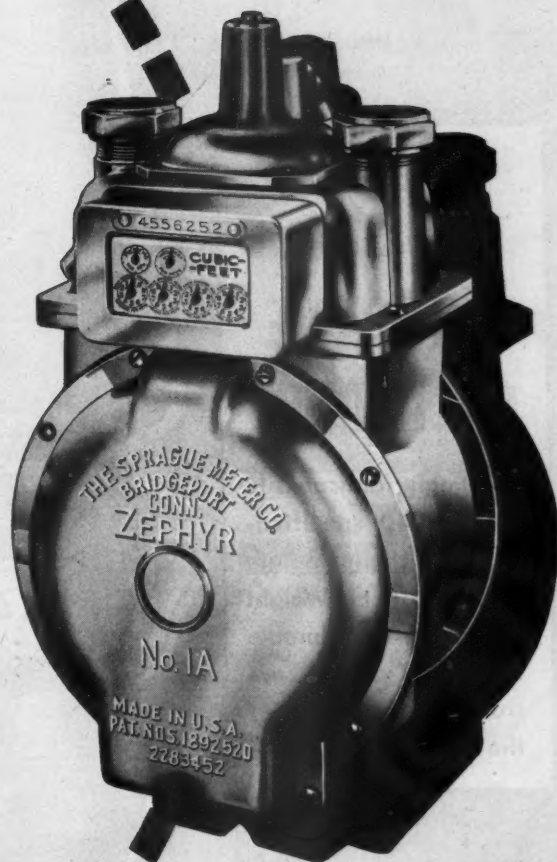


# BETWEEN YOU AND YOUR CUSTOMERS

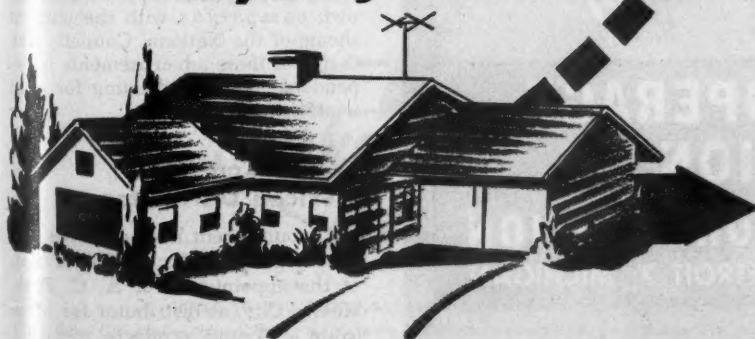
*Sprague*

## COMBINATION METER and REGULATOR

Establish and hold good customer relations by standardizing your metered system with the Sprague Combination Meter and Regulator. Combining modern styling in keeping with today's trend toward streamlined design and accuracy that gives the home-owner complete confidence in your service, this meter brings savings to you through fewer service calls, ease in mounting and a simple actuating design that allows proving by even the smallest of shops.



THE *Sprague* METER COMPANY



MAIN OFFICE and PLANT

**BRIDGEPORT,  
CONNECTICUT**

BRANCH OFFICES

**DAVENPORT, IOWA  
HOUSTON, TEXAS  
LOS ANGELES, CALIF.  
SAN FRANCISCO, CALIF.**



## St. Paul Hydraulic Moves to Mattoon

St. Paul Hydraulic Hoist has announced the complete move of its sales and service functions, covering both domestic and export activities, to its new expanded plant site in Mattoon, Ill.

St. Paul transferred its manufacturing operations from Minneapolis to a modern plant with improved facilities in Mattoon last winter. Sales and service remained at the old plant site in Minneapolis until June 1 to facilitate operations during the move.

## Six Truck Drivers Win Safety Award

Congratulations to George B. Sheppard, president of the Carolina Suburban Gas Co., and his six award-winning drivers! Every time LPG is linked with safety in the eyes of the public the industry's public relations effort gets a helping hand.

Certificates and lapel buttons, emblematic of the National Safety Council award, were presented to the six winners at a banquet given in their honor at Blazer's lodge on Lake Greenwood, S. C. Presentations were



**National Safety Council awards** being made to six truck drivers of Carolina Suburban Gas Co., Laurens, S. C., by the company president, George B. Sheppard, independent Rulane Gas Dealer since 1934. The drivers are, front row, left to right: Charles G. Strickland Jr., Thomas W. Campbell, Kenneth Elledge; back row, left to right: Clyde C. Taylor, S. Berry Hill, Ernest Porter, Mr. Sheppard.

# WHO is Harry Kehrner?

\*(pronounced care)



The man who suggests you **EXCHANGE** that old Corken Packed Pump for one with a Mechanical Seal, Guaranteed Not To Leak—You won't be out of a pump—Get the **EXCHANGE** Pump installed, then return your old pump.

**ASK THE HUNDREDS WHO HAVE DONE IT IF IT ISN'T A WONDERFUL DEAL.**

# CORKEN'S

208 E. Grand Oklahoma City, Okla. RE 6-6518  
EASTERN OFFICE 916 PUTNAM AVE. PLAINFIELD, N. J. PHONE PL 7-1305  
DISTRIBUTORS IN PRINCIPAL CITIES

made by Mr. Sheppard, one of the first dealers in bottled gas in the southeast.

The National Safety Council, which is a federally chartered organization, keeps a record of drivers submitted by its members and makes the awards to those drivers who attain a prescribed ranking. Carolina Suburban Gas Co. joined the organization over a year ago in an effort, Mr. Sheppard stated, to impress upon the company's drivers the necessity of careful driving.

## Robertshaw-Fulton Acquires Toronto Plant

Robertshaw-Fulton Controls Ltd. (Canada) has acquired a manufacturing plant in the Toronto area on a long term lease, and will start operations soon.

The new company will assemble and manufacture thermostatic controls for Canadian customers in the kitchen range, water heater and space heater fields.

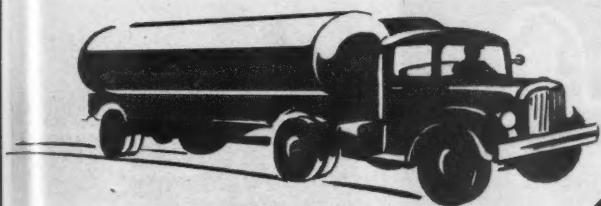
The decision to undertake manufacture of certain of the Robertshaw-Fulton products in Canada was dictated by the expanding needs of Canadian industry, company officials in Toronto said.

## Newman's Establishes New Office, Warehouse

Newman's Inc., a valves and fittings house, has established a new general office and warehouse in Tulsa.

Jay Newman, president, announced that the new building includes 2000 sq ft of office space and 10,000 sq ft of warehouse space. An additional 25,000 sq ft is in the old warehouse building at the same site.

The new addition was built dock high to facilitate truck loading and unloading.

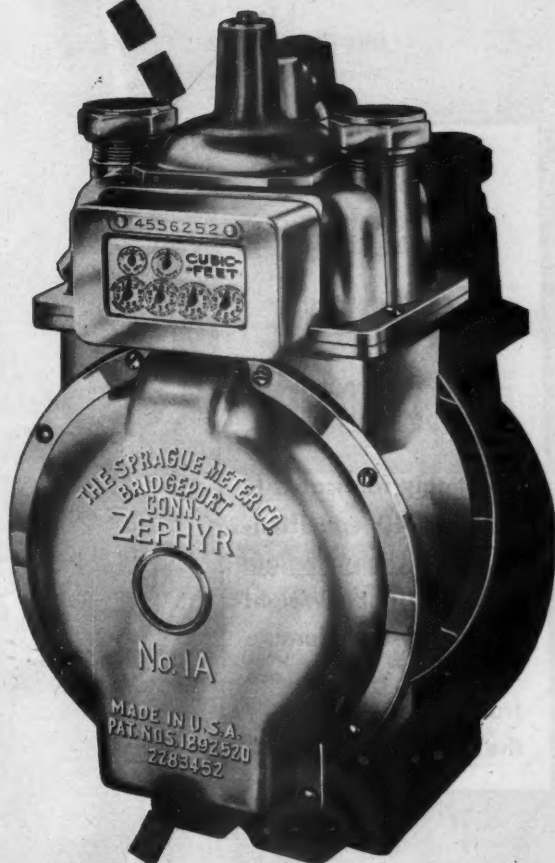


# BETWEEN YOU AND YOUR CUSTOMERS

*Sprague*

## COMBINATION METER and REGULATOR

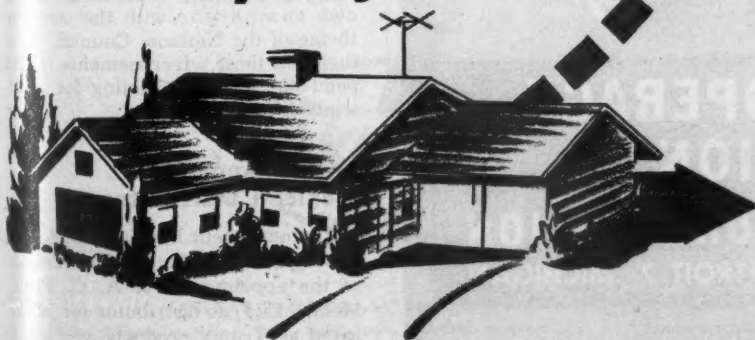
Establish and hold good customer relations by standardizing your metered system with the Sprague Combination Meter and Regulator. Combining modern styling in keeping with today's trend toward streamlined design and accuracy that gives the home-owner complete confidence in your service, this meter brings savings to you through fewer service calls, ease in mounting and a simple actuating design that allows proving by even the smallest of shops.



THE *Sprague* METER COMPANY

MAIN OFFICE and PLANT  
**BRIDGEPORT,  
CONNECTICUT**

BRANCH OFFICES  
**DAVENPORT, IOWA  
HOUSTON, TEXAS  
LOS ANGELES, CALIF.  
SAN FRANCISCO, CALIF.**



# "All Around CHAMPS"

**\*100 LB.  
PROPANE CAPACITY**  
Approx. Tare Weight—70 lbs.

## Lee PROPANE CYLINDERS

Exactly fabricated to ICC4BA240 specifications of High-Strength Steel . . . Light in Weight but strong and durable . . . Lee Cylinders are truly CHAMPIONS of the industry.

**20 LB.  
PROPANE CAPACITY**

FEATURES . . . Data Plate—Embossed  
Feetring . . . High Quality Polar Finish

**STEEL COOPERAGE  
DIVISION**  
**THE SERRICK CORPORATION**  
4801 BELLEVUE • DETROIT 7, MICHIGAN



—Photo courtesy Missouri LP Gas Talks

**George Strode** of Empire Stove Co. uses a ready-fueled floor furnace as a service and sales tool to the L. P. gas trade. Mr. Strode's "sales kit" is his constant companion and a good way to demonstrate sales and service points.

### American-Standard Appoints Florez

American-Standard has appointed Florez Inc. as consultants in the field of retailer development. D. J. Quinn, general sales manager of the company's plumbing and radiator heating division, has announced.

### John Wood Enters Mrs. America Contest

"Renewed sponsorship by the American Gas Association of the Mrs. America contest and promotion offers an expanded sales opportunity for the makers of gas appliances," says R. W. Simpson, vice president and general sales manager of John Wood Co.

This year marks the second participation by the company in the contest, according to Mr. Simpson, and was entered into in view of the success and acceptance of the previous program on the part of plumbers and dealers.

### National Council Mails Promotion Kits

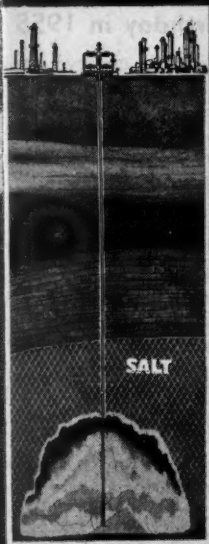
National Council for LP-Gas Promotion has mailed 11,000 copies of its 12th merchandising kit to L. P. gas marketers to help them tie in their own campaigns with the current theme of the National Council. The theme of these advertisements is dependable L. P. gas heating for next winter's icy blasts.

### Trinity Appoints Mexican Distributor

Announcement has been made by Trinity Steel Co. Inc., Dallas, Texas, of the appointment of A. C. Fink, Mexico City, as distributor for Mexico of all Trinity products.



**Quality Extremes  
are  
Skelgas Routines**



## THE LAKE NO HUMAN HAS EVER SEEN

In great salt beds, deep under the surface of the earth, Skelgas has drilled and hollowed out huge caverns—with a storage capacity of millions of gallons of Skelgas. These underground "lakes" of Skelgas are a relatively new development in the constantly improving supply resources of Skelgas—constantly keeping ahead of the ever-growing demand for Skelgas fuel.

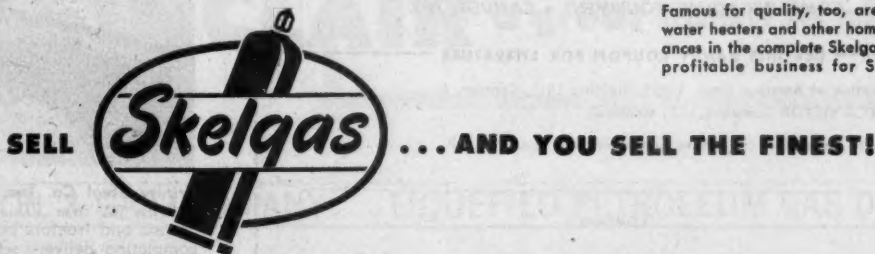
It's another good reason why you are always sure of having an adequate

supply of fuel for your customers—when you're a Skelgas Dealer. Skelgas not only goes to extremes to assure the quality of the product at all times—but Skelgas also goes "all out" when it comes to supply and distribution facilities. Our huge fleet of tank cars and trucks, in continuous operation, assure your supply of Skelgas—no matter where you are located in the Skelgas distribution area.

For interesting profit facts about the Skelgas Franchise, write today!



Famous for quality, too, are Skelgas ranges, water heaters and other home and farm appliances in the complete Skelgas line. They mean profitable business for Skelgas Dealers.



**SKELGAS DIVISION, SKELLY OIL COMPANY • P. O. BOX 436, KANSAS CITY, MISSOURI**

**Sales Offices:** Des Moines, Iowa • Indianapolis 4, Indiana • Jackson, Michigan • Kansas City 41, Missouri • Lincoln 8, Nebraska • Lubbock, Texas • Milwaukee, Wisconsin • Shreveport, Louisiana • St. Louis 17, Missouri • St. Paul 4, Minnesota



## How to step up service and win new customers

The  
Answer:



**RCA  
2-WAY  
RADIO**

"Our slogan is '15 minute service when you need it,'" says William H. Sullivan, President and General Manager, Shore Gas and Oil Co., one of the largest independent distributors in New Jersey. "With radio it is often possible to dispatch a truck while the customer is still on the phone!" No wonder business is booming for this firm.

Their RCA 2-Way Radio is more than paying for itself, according to the record. Based on their expendi-

tures for equipment and service, plus 10-year depreciation, radio costs them 70 cents a day per truck. Figuring three dollars an hour running time for a truck and saving an average of one hour each day per truck, radio is paying generous dividends.

Attract business *your* way by installing RCA world-famous 2-Way Radio. Accident-proof 16-gauge steel case, housing the transmitter-receiver, withstands toughest shocks and jolts. Quality parts assure top performance, proof against gruelling weather conditions, whether intense heat or intense cold. Operating costs are low, servicing easy.

The RCA Service Company is at your beck and call for installation and service wherever you are. Why not mail the coupon today? You'll incur no obligation.

For the Best in 2-Way, Say "RCA"



**RADIO CORPORATION of AMERICA**

COMMUNICATIONS EQUIPMENT • CAMDEN, N.J.

USE THIS HANDY COUPON FOR LITERATURE

Radio Corporation of America, Dept. 1-204, Building 15-1, Camden, N. J.  
In Canada: RCA VICTOR Company, Ltd., Montreal

☐ Please send literature ☐ Have Communications Specialist call

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

ZONE \_\_\_\_\_

STATE \_\_\_\_\_

## National Cylinder Acquires California Carbonic Co.

National Cylinder Gas Co. has acquired California Carbonic Co., Los Angeles, further augmenting its carbon dioxide business, Charles J. Haines, president, has announced.

## Crane Co. to Observe 100th Birthday in 1955

Crane Co. will observe its 100th birthday on July 4, 1955. The centennial will be celebrated at Crane's Chicago general office, plants, branches and subsidiaries during the entire calendar year.

On July 4, 1855, Richard Teller Crane, the founder, opened a one-room, self-built shop in Chicago. Crane Co.'s rise from humble beginnings a century ago to a multi-million dollar corporation is a typical American success story.

The company began by supplying a modest quality product—brass lightning rod tips—to a small, local market. It has grown with Chicago and the nation to a point in its career where the 40,000 Crane products are used in factories, farms, offices and homes throughout the country.

## "Wonderair House" Uses Gas Air Conditioning

"Wonderair House," one of 22 homes in the "Air Conditioned Village" project opened recently in Austin, Texas, uses a year round air conditioning unit. The air conditioner was manufactured by Servel.

The unit is a 2-ton, gas absorption, direct fired model which was pre-assembled as a package at the factory and delivered to the site ready for connection. It occupies 8.7 sq ft of floor space.



Trinity Steel Co. Inc. recently accepted delivery of over 20 International truck chassis and tractors purchased for use in completing delivery schedules on a large order for their new Model 106 truck tank and "blimp" transport units. Large single barrel "blimp" transport (left) is made ready for delivery to Rhode Island.

## "THERE'S A BONUS INSIDE!"

There's a lot more than meets the eye in a tank-load of LP-Gas. The really important advantages are the ones you can't see—but take a tank marked "SINCLAIR" and *you know* you can count on a bonus of 5 added, *important* extras. INTEGRITY, REPUTATION, RESPONSIBILITY, PERFORMANCE, and GOOD SERVICE.

You'll find this bonus in every shipment of SINCLAIR LP-Gas. And you'll find, too, this gas has high heating values—with moisture and impurities removed. It will pay you to investigate—*soon*.



# SINCLAIR

a great name in oil

SINCLAIR OIL & GAS COMPANY... LIQUEFIED PETROLEUM GAS DIVISION

Sinclair Building, Tulsa, Oklahoma



# RECTORSEAL #2



**SEALS BETTER  
COSTS LESS**

Compare the quality — Compare the price of Rectorseal #2 with whatever thread compound you are now using, and you'll know why Rectorseal #2 is rapidly becoming the favorite of the industry.

## QUALITY

Rectorseal is thin in the can—thickens in the joint. Easier to apply. Never hardens—Insoluble—Smoother—Cleaner—No Waste—Holds odorants—Convenient containers. Rectorseal #2 is the only thread compound having ALL of these qualities.

## PRICE

Here's the good news! Rectorseal #2 costs less than any compound insoluble in petroleum or its fractions.

## PROOF

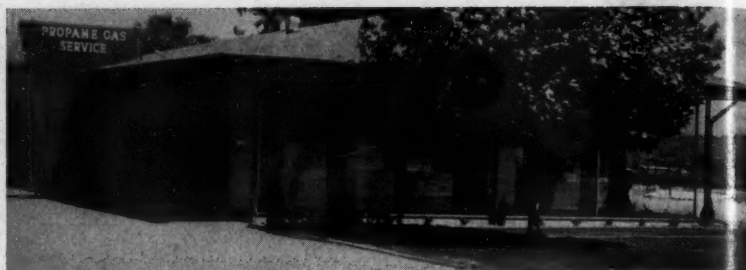
Write for free sample, additional information, and prices on Rectorseal #2.

Your supply house has it or can get it for you.

RECTORSEAL, Dept. "A"  
2215 Commerce St. Houston 2, Texas

**RECTORSEAL # 2**

MAKING THE L.P. GAS INDUSTRY SAFER



Hoover's Propane Gas Service, located in Ukiah, Calif., has recently opened a 3200-sq ft redwood show room and office just off Highway 101. Located back of this building is a warehouse, which has another small office, a 4 by 40 ft work bench, appliances, service parts and a complete hookup for testing automatic washers and dryers before delivery. Owner Don Hoover's investment was near \$75,000 and he is justifiably proud of his new building and grounds.

## Towns Under 50,000 Have Best Sales Prospects

Gas range makers can look to towns with under 50,000 population for better selling opportunities, according to *Household* magazine. This market accounts for 50% of the occupied dwelling units reporting gas for cooking fuel.

Says *Household*: "In the small city and town market, where 63% of all occupied dwelling units are located, there are better than 12 million potential replacement gas range customers, and almost 15 million prospects for first-time sales of new gas cooking equipment."

## Master Tank Fabricates Own Tank Heads

Tank heads of all standard specifications are now a product of Master Tank & Welding's own assembly line. This operation used to be subcontracted to eastern firms but now, due to a planned schedule of completely revamping their production facilities, Master Tank can fabricate practically all types of tank heads.

## AGA Gives Results Of Research Program

An AGA committee on comparison of competitive services recently completed a research program, begun late in 1951 at the engineering experiment station of the University of Illinois.

According to the committee, standby studies showed that the daily required input for gas water heaters averaged approximately 23,000 Btu, while the average of electric heaters was approximately 9100 Btu daily. This amounts to an average of about 820 Btu per day per gallon of actual tank capacity for gas heaters as compared to 170 for electric heaters.

About five times as much heat is required by the gas heaters as is required by electric heaters to maintain a tank full of hot water without any withdrawal.

The one hour delivery studies showed an average recovery efficiency for the gas water heaters of 76% as compared to 93% for electric heaters. Gas heaters had twice as great an output as electric heaters in gallons delivered per gallon of actual tank capacity.

The two hour delivery studies showed the same recovery efficiencies whereas the delivery per hour gallon of actual tank capacity showed two and one-half times as much output from gas as from electric water heaters. Required heat input was the same as in the one hour tests.

The automatic clothes washer studies showed that all of the gas water heaters except the 20-gal. heater satisfactorily supplied hot water for four consecutive washer cycles, whereas only the 80-gal. electric heater satisfactorily supplied hot water.

The required input per cycle for the gas water heaters was approximately 22,500 Btu's as compared with a requirement of approximately 15,900 Btu's for the electric water heaters, or an energy ratio of about 1.41:1.

## East, Midwest, West Share Servel Awards

Awards in Servel's "Big Needle" national sales contest, announced by Neal E. Schuman, field sales manager, were widely distributed.

First place was taken by Robert B. Puckett, district sales manager for the Detroit area; second and third places went to Philip E. Arnold, Los Angeles area, and Raymond Lubar, Washington, D. C., area.

## COLUMBIAN Full-Skirted Delivery Trucks

Backed by 60 years' tank-building experience. Pump mounted with direct-driven power take-off. Engineered to your state regulations. Built for speedy transfer. Pictured is 1600-gallon custom made unit. Curbside or rear-mounted controls.



# COLUMBIAN L-P

Delivery Trucks • Semi-Trailers

Storage Tanks • Domestic Systems

Anhydrous Ammonia Tanks

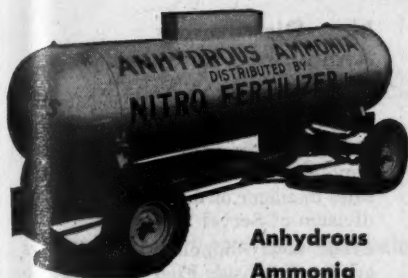
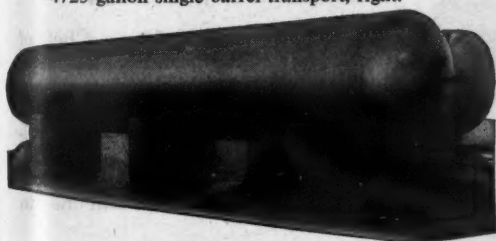
### COLUMBIAN Custom Built Semi-Trailer

To your order, single barrel or double. Greatest strength with lightest weight for a payload that PAYS! 4725-gallon single barrel transport, right.



### COLUMBIAN Bulk Storage

Long service life assures you maximum economy. Sizes to meet every need. ASME code construction throughout. Single or multiple installations. At left, dealer tanks up to 6000 gallons capacity.



### Anhydrous Ammonia

Anhydrous Ammonia tanks up to 6000 water gallons. For application, transportation and storage. Fittings protected by heavy shield. An ever-growing, profitable side line for you!

### COLUMBIAN Twin-Barrel

For delivery or transport, note the functional location of controls, hose reel, metering equipment. Designed to cut delivery time, increase safety... no waste motions. All sizes to meet your specifications.



### COLUMBIAN Domestic Systems

ASME construction, in all sizes. Quality materials and workmanship throughout. Fittings conveniently grouped and protected by sturdy weather cap.



WRITE TODAY for FREE, Completely Illustrated Literature!

COLUMBIAN STEEL TANK CO., Box 4048-C, Kansas City, Mo.

# Get the Lion's Share of the Business



**8 Fully Vented Heaters**  
15,000 BTU to 85,000 BTU  
**23 Unvented Heaters**  
10,000 BTU to 50,000 BTU

Every Martin Gas Heater is AGA approved for natural, liquefied and manufactured gases.

There is a Martin Heater for every need.  
Write your jobber or direct for complete catalog.



Over  
49 years  
stove  
experience

**MARTIN STAMPING & STOVE CO., Huntsville, Ala.**

**We need fittings  
QUICK!  
When can you  
ship 'em?**

**SPAN always  
ships quick...your  
order's going out  
IMMEDIATELY!**

for fast service on...  
**COPPER TUBE  
FITTINGS**

Phone... Wire... or Write TODAY



SPAN gives the fastest shipping service in the industry, because SPAN manufactures and stocks a huge inventory of Copper Tube Fittings. Write for catalog and price list of high quality flared fittings, compression fittings, and valves.



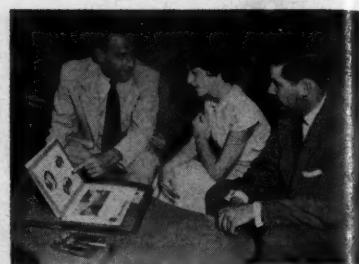
**SPAN**  
BRASS MFG. CO.  
800 WILSON STREET  
OTSEGO, MICHIGAN



**RADIANT HEATERS**  
Beautiful styling with fine heating qualities. A solidly built unvented cabinet circulator. Smooth burner operation. Three sizes.

Write for Your Catalog

**ADAMS BROS. MFG. CO., INC.**  
Established 1898  
1500 NORTH AVE., W. PITTSBURGH 33, PA.



A "Boiler-Maker" campaign, designed by American-Standard to stimulate fall sales for the heating retailer, is now underway. It consists of a comprehensive advertising schedule and two promotional kits that contain sales creating items to help heating contractors. A self-selling portfolio simplifies sales presentation to prospective customers.

## Men Attend Anchor General Sales Meeting

Meeting in Tulsa, recently to outline enlarged marketing plans for the balance of this year were 26 men from Anchor Petroleum Co. Anchor offices represented at the general sales meeting included Des Moines, Shreveport, Toledo, Houston, Long Beach, Calif., San Francisco, Oklahoma City, Westfield, Mass., Midland, Texas, and Bath, N. Y.

## Magic Chef Inc. Established in Canada

Establishment of Magic Chef of Canada Ltd, has been announced by Magic Chef Inc. Leon Zakrzewski has been named president of the all-Canadian organization that will direct the sale and manufacture of Magic Chef domestic products in Canada. Headquarters will be in Toronto.

## New Distributors Announced by Servel

Appointment of new Servel air conditioning distributors to serve sections of Florida and New York was announced recently by W. J. Hoising, sales manager of the air conditioning division of Servel Inc.

The newly appointed distributors are the Southside Fuel Oil Co., Jacksonville, Fla., and Louis N. Picciano & Son, Endicott, N. Y.

## Coleman Plans Special Space Heater Promotion

A nationwide "comfort sale" promotion of gas fired space heaters will be staged by Coleman Co., Wichita, Kan., from Sept. 1 to Oct. 15. The



# TAPPAN'S LP CARNIVAL SALE



Here's a complete "package" timed to give a big boost to your LP business. It's hard-selling ... packed with SAVINGS and FEATURES for your customers, PROFITS for you!

An exciting  
Tappan  
Promotion to  
perk up LP  
sales!

- 3 COLOSSAL TAPPAN LP RANGE VALUES!**
- 3 STUPENDOUS TAPPAN TRAFFIC BUILDERS!**
- 3-PART PLAN FOR GIGANTIC SALES!**

*Hitch your sales to  
Tappan's Big Carnival...*

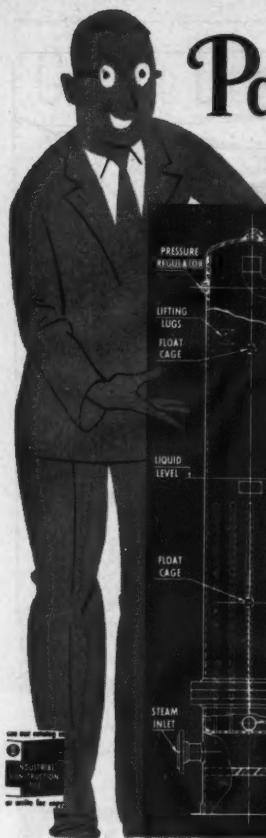
Get in touch with your local representative today!

**PLAN...PROMOTE...**  
**SELL LP GAS NOW**  
during Tappan's  
**Colossal Carnival Sale!**

See this TAPPAN MODEL HV-64!  
It's just one of the many value-  
packed Carnival stars!



THE TAPPAN STOVE COMPANY, MANSFIELD, OHIO



# Paracoil SERIES 48E

## LPG vaporizers

(STEAM TYPE)

**FOR INDUSTRIAL AND UTILITY INSTALLATIONS**

**CHECK ✓ These Points of Proven Superiority...**

- ☐ HIGH OUTPUT CAPACITY IN MINIMUM FLOOR SPACE
- ☐ NON-FREEZING, FAST DRAINING CONDENSATE SYSTEM
- ☐ OPERATES UNDER AUTOMATIC CONTROL
- ☐ ENTIRELY SAFE—NO OPEN FLAMES—USES LOW PRESSURE STEAM
- ☐ STANDARD PRODUCTION MODELS TO 6000 G.P.H.

DESIGN: ASME STAMPED, PAR U-69,  
N.B.F.U. PAMPHLET 58

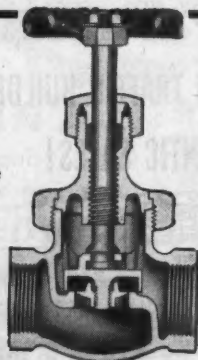
Write for additional data and prices.

## DAVIS ENGINEERING CORPORATION

1058 East Grand St., Elizabeth 4, New Jersey  
30 Rockefeller Plaza, New York 20, New York

**EASY TO GET**  
WHEN YOU NEED THEM

gate  
•  
angle



globe  
•  
check

## CRANE BRONZE VALVES FOR LP GAS

Available everywhere through Crane Branches and Wholesalers. Underwriters' Approved — sizes 1/4 to 2-in. — for working pressures up to 250 pounds. For storage piping, customer installations, distribution equipment, etc. See Crane Catalog or write for literature.

CRANE CO., General Offices:

836 S. Michigan Avenue, Chicago 5, Ill.



the "Perfect Cap"

for Chimneys, Flues, Ventilators

**ELIMINATES DRAFT TROUBLES**

Caused by downdrafts, backdrafts, pilot blowouts, condensation. Acts as spark arrester. Creates even stack temperature. Improves combustion and cuts fuel costs. Will not freeze shut or soot up. Field tested four years in all kinds of weather, in every part of the country, with all types of units. Improved features give long life. Available in galvanized steel or aluminum in all popular stack sizes.

Sell DRAFT KING on new and old equipment installations. Improves appearance and efficiency of chimneys or ventilators. Eliminates need for tall flues and dangerous guy wires.

Contact your favorite Distributor,  
or write us:

**A. R. WOOD MFG. CO.**

Box BP-97, LUVERNE, MINNESOTA

campaign will feature a gift offer of a plaid wool robe.

The promotion will be aided by newspaper advertising, radio transcriptions, television and movie films, billboards and direct mail.

## Cities Service Division Opens New Office

Crude oil supply division of Cities Service Oil Co. has established an office in Oklahoma City with F. W. Stewart as field representative. Announcement was made by C. S. Mitchell of Bartlesville, Okla., vice president of Cities Service Oil Co. and manager of its crude oil supply and transportation division.

## Propane Sales Rise in Ontario

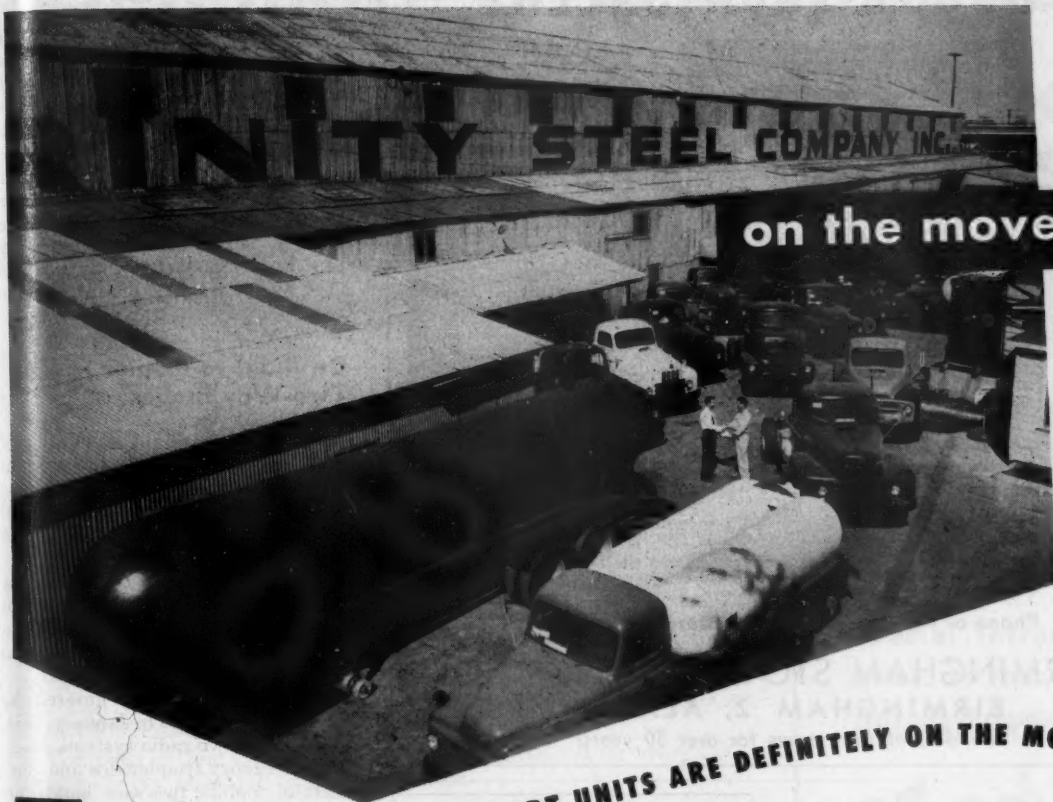
The liquefied petroleum gas business is expanding rapidly in Ontario. Operating results of the largest propane firm in eastern Canada—Superior Propane Ltd., Toronto—for the first six months of 1954 show an increase of 37% over the same period of last year. Total sales of propane and appliances amounted to \$1,054,000.

## Dresser Industries Sells Kobe Inc.

Dresser Industries Inc., manufacturers of oil, gas and chemical equipment, has sold one of its operating units, Kobe Inc., division of Dresser Equipment Co., Huntington Park, Calif., according to a statement by H. N. Mallon, president. The Kobe division manufactures and distributes hydraulic oil well pumping equipment.



Two outstanding students receive scholarships to Carnegie Institute of Technology from John A. Robertshaw, president of Robertshaw-Fulton Controls Co. These scholarships are intended as contributions to the engineering profession. Winners are not required to enter employ of the company after graduation.



on the move...

YES, TRINITY TRUCK AND TRANSPORT UNITS ARE DEFINITELY ON THE MOVE...

*Everywhere*

**Pictured: W. Ray Wallace, Secretary-Treasurer Trinity Steel, accepting delivery of 20 International chassis and Tractors for Tank Truck and Transport mounting from M. K. Bailey, International Harvester Co.**

With Advance Design our goal... customer satisfaction our aim... perfection our motto... we here at Trinity offer our humble and sincere appreciation for your overwhelming faith in our New Design Delivery Equipment. Delivery schedules are being met... Quality is being maintained on every unit... whether for the smallest or largest LP Gas Dealer and whether the order is for one or twenty units.

**HAVE YOU SEEN TRINITY STEEL'S NEW DELIVERY EQUIPMENT?**

Write, wire or phone today for full and complete information and prices... you'll be glad you did.



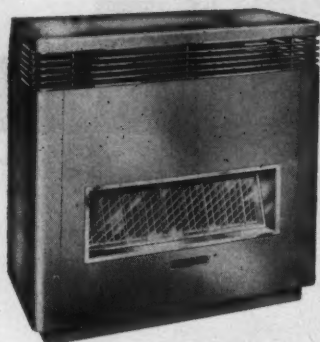
3301 SOUTH LAMAR STREET  
HUNTER 8321 • DALLAS, TEXAS



# BOOST YOUR SALES!

*Thermolaire*

GAS  
HEATERS



#### CIRCULATORS VENTED

A distinctive and beautiful cabinet in all sizes for use when venting is required or preferred.



#### CIRCULATORS UNVENTED

Interiors well baffled with aluminum coated steel providing cooler cabinet. Sizes to meet your exact needs.

Radiants interchangeable — Cast iron burners with interior baffle and raised ports — Chrome hearths — Finished in a gracious coppertone baked enamel — All AGA approved.

Phone or write for illustrated literature and prices

**BIRMINGHAM STOVE & RANGE CO.**  
**BIRMINGHAM 2, ALABAMA**

"Builders of fine stoves for over 50 years!"

## Natural Gas Standby



A typical Draketown Propane Plant for augmentation and standby

Whether your load is large or small, you will find a Draketown design to meet your specific requirements. Ready at the turn of a valve—completely automatic if you wish—accurate and dependable—your Draketown Plant keeps that pressure up when things get rough.



**PROPANE PLANTS**

"Good Gas Insurance"

If you have a gas problem, we can help you. We operate from coast to coast and overseas. Phone or write today—no obligation!

**DRAKE & TOWNSEND**

Consulting • Design • Engineering • Construction  
11 WEST 42ND STREET • NEW YORK 36, N. Y.

## First See GRIFFITHS for CONVERSION PARTS

We can supply a wide assortment of spuds, orifices and other parts for converting domestic and commercial equipment to any type gas. Also, a complete line of repair parts for all types of gas meters.

Write for Catalog

**E. F. GRIFFITHS  
COMPANY**

350 EAST WALNUT LANE  
PHILADELPHIA 44, PA.

Serving the Gas Industries  
For Over 40 Years.

## Sid Menely Named Chambers Distributor

Appointment of the Sid Menely Co., Oklahoma City, as a distributor was announced recently by A. H. Scheffer, sales manager for Chambers of Indianapolis, gas range manufacturer.

Mr. Scheffer said the new distributor will handle the entire state of Oklahoma with the exception of Beaver, Texas, and Cimarron counties. The territory formerly was covered by the Hales-Mullaly Co., Oklahoma City.

## Du Mont to Exhibit Two-Way Radios

Allen B. Du Mont Laboratories' new mobile two-way radio systems will be exhibited at the forthcoming national conference of Associated Police Communication Officers in Pittsburgh, Penn.

The conference, to be held at the William Penn Hotel, is an important annual event in the mobile radio industry and attracts communication experts from all over the country.

Du Mont, which first entered the field of mobile radio in January, 1954, will exhibit two radio systems covering emergency frequencies and commercial mobile two-way bands, according to C. J. Harrison, sales manager for the mobile communications department.

## Mullins Retains Frank Cortright

Frank W. Cortright, former executive vice president of the National Association of Home Builders, has been retained by Mullins Manufacturing Corp., makers of Youngstown kitchens, as director of builder's research, it is announced by C. D. Alderman, vice president in charge of sales.

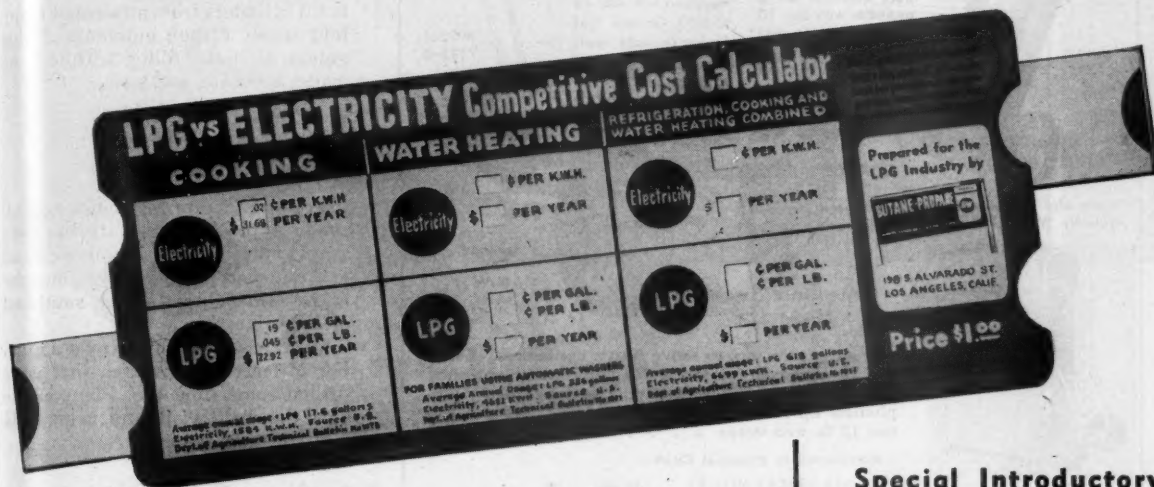
## Craft Company Opens for Business

Craft LP-Gas Co. has opened its doors for business. The new 30,000-gal. L. P. gas plant is located at Bono, Ark.—about nine miles northwest of Jonesboro in the rice and cotton growing section of northeast Arkansas.

Servicing of rice irrigation pumps, dryers and cotton gins will be an important function of this new venture in addition to sales and service of domestic tanks and cylinders.

The plant is owned and operated by Jerry Craft.

# Sell more LPG Appliances with this New Sales Tool!



This is the new and ingenious pocket calculator recommended by Editor Carl Abell in his "How to BEAT Electrical Competition" series in BUTANE-PROPANE News.

The Competitive Cost Calculator is an indispensable aid for every LPG operator—every salesman of LPG appliances.

- Simple to use—any housewife can understand it.
- Shows in dollars per year the cost of LPG (either bottled or bulk) vs. electricity, for cooking and water heating.
- Proves to your prospect that electricity costs more than liquefied petroleum gas.
- Made of durable plastic laminated board, for long life.

Using figures provided in the U. S. Dept. of Agriculture's Technical Bulletin 1073, the Competitive Cost Calculator clinches your appliance sales for you by proving the economy of L. P. gas.

**Special Introductory price to readers of Butane-Propane News**

**\$1.00 each**

**Use the order coupon below**

Orders of 50 to 99—80c ea.

Orders of 100 or more 70c ea.

To get the utmost use from your Competitive Cost Calculator read the "HOW TO BEAT ELECTRICAL COMPETITION" series each month in Butane-Propane News.

**24 months for \$3**

Saves you 25% from regular rate of \$2 a year

**BUTANE-PROPANE News**  
198 S. Alvarado St.  
Los Angeles 57, Calif.

Here's my remittance for \$\_\_\_\_\_ to pay for the items checked below:

\_\_\_\_\_ Competitive Cost Calculators @ \$1 each  
(In California add 3% sales tax)

New ☐ Renewal ☐

☐ 24 months of BUTANE-PROPANE News for \$3  
(Saves you 25% from regular rate of \$2 a year)

☐ 12 months of BUTANE-PROPANE News for \$2

Name \_\_\_\_\_

Company \_\_\_\_\_

Mail Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

I have checked below only the boxes that best describe my company.

WE SELL:

☐ Bulk LPG ☐ LPG appliances  
☐ Cylinder LPG ☐ Anhydrous Ammonia

NO. OF LPG CUSTOMERS SERVED \_\_\_\_\_

(or check approximate number below):

☐ 500 or more ☐ 250-500  
☐ Less than 250

FACILITIES:

☐ Appliance showroom  
☐ Cylinder storage  
☐ Bulk LPG storage tank  
☐ LPG engine fuel filling station

My job is \_\_\_\_\_

Signed \_\_\_\_\_



## Cylinder Trucks Cut Delivery Costs!

The M/W trade mark signifies the cylinder truck is made by the world's oldest and original manufacturer of trucks for handling LPG cylinders.



MODEL 7325

Standard cylinder truck shown at left is available with size 10 x 2.75 tires in two types.

Air Tires.....\$19.25

Semi-pneumatic.....\$18.20

Truck at right is equipped with size 10 x 3.50 General tires having separate inner-tubes.

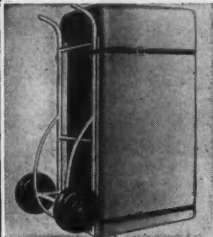
A popular model at.....\$27.40



MODEL 7325-G

WRITE FOR  
COMPLETE CATALOG

Trucks also available for handling large 400 pound bulk cylinder. Write for illustrated literature and prices.



★ ★ ★

Appliance Truck  
Model 229

The safe, sure way to move heavy appliances. Large 12" air tires prevent damage to linoleum or varnished floors. Truck provides safe way to move heavy appliances up or down stairs. Price with two 12 ft. web straps.....\$47.60

(Distributors in Principal Cities)

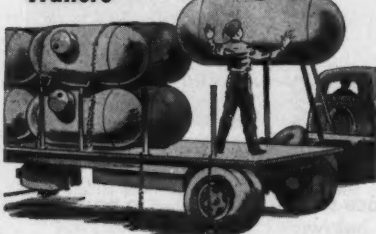
ALL TRUCKS MFG. BY

# Moellenbrock & Wilke

WASHINGTON, MISSOURI

## NOW—PROMPT DELIVERY OF BURNHAM PROPANE SYSTEMS

In Burnham  
Trailers



This quicker, more dependable delivery avoids expensive handling at destination. It eliminates the possibility of transit delays or possible damage associated with other type shipments.

The superior quality of Burnham engineered tanks plus the economy of truck deliveries direct from the factory gives you an opportunity to save that's well worth your consideration. Why not take advantage of it?

## BURNHAM LPG TANKS

Available for immediate shipment—15 sizes—either top or end mounted in capacities from 250 to 1,000 gallons.



**Burnham Corporation**

• TANK DIVISION • IRVINGTON, NEW YORK

## GAS DEALERS . . . Double Your Income

We are signing franchises with bottle gas dealers all over "hard water" America.



You have the set-up and the customers. Deliver rental softener units to homes, laundries, beauty parlors, cleaning plants . . . wherever soft water is needed.

Get a

# Filter-Soft WATER

Franchise

All you need are the softener units and the inexpensive regeneration equipment. Franchise includes the sale of DOWEX to all domestic, commercial and industrial areas.

Write, wire or phone

# FILTER-SOFT Corporation

Dept. BPN

12911 ARTESIAN AVE., DETROIT 23, MICH.

Safety and flexibility are features that are highlighted in this installation. A Corken Model 74 Pump and Model 290 Compressor are incorporated into the plant making it possible to use either pump or compressor or both in unloading tank cars and transports and loading bobtail trucks or transports. The plant is also set up to fill cylinders from a two-spot manifold using Fisher automatic filling valves. Cylinder filling will be automatic, accurate, and easy.

## Oklahoman Plans Shallow LPG Flood

Frank Buttram, geologist and oil producer of Oklahoma City, has been granted preliminary permission to inject liquefied petroleum gas into the Camp Hill field reservoir, southeast of Palestine, Texas.

Mr. Buttram has taken over a number of leases in the area that were drilled some time ago. Plans are to flood the shallow oil sand, using LPG first and then water.

## Stewart-Warner Advances Building Program

A new building program necessitated by continuing expansion of the Winkler line of heating and cooling equipment is being carried out by Stewart-Warner Corp. at its U. S. machine division. A one-story brick addition, containing nearly 50,000 sq ft, is being erected at the largest of its three plants in Lebanon, Ind., and should be ready for occupancy around the first of the year.

In addition to providing increased manufacturing facilities, one section will be converted into office space to relieve congestion in administrative offices.

## GAMA Votes Membership To Five Firms

Five new members have joined the Gas Appliance Manufacturers Association. They are: Adams Manufacturing Corp., Los Angeles; McIntyre Engineering Co. Inc., San Francisco; Westcott, Alexander Inc., Madison, N. J.; Ko-Z-Aire Products Inc., Baltimore; and Switson Industries Ltd., Welland, Ont., Canada.

## Brennan to Distribute For Whirlpool

Brennan Appliance Distributors Inc., Detroit, has been appointed a distributor for Whirlpool Corp., it was announced recently by Whirlpool Sales Manager, John M. Crouse.





**MR. JULIUS KLEIN, President  
Caloric Stove Corporation  
says:**



# "Caloric is ready for a big new market with Wilcolator's OVEN-REDDY"

"We've been fortunate to date in seeing our sales volume grow in each of the past five years. And we believe, without false pride, the basic reason is this:—we have consistently tried to offer today's smart buyers every feature that makes a gas range give better service in the home.

"In short, we have tried as often as possible to be the first with the best.

"In keeping with this policy, we are now equipping the Automatic Caloric 'Built-in' gas range with Wilcolator's Oven-Reddy control, and we know it's going to make more and easier sales in today's tough market for our dealers and for us.

"Frankly, we feel that a 'built-in' gas range with Oven-Reddy is a far better buy, in the terms of the service it will give, than a 'built-in' gas range without Oven-Reddy. For women have always wanted an automatic signal that tells them exactly when their oven has reached cooking temperature. Now they can get it!

"This seemed pretty clear to us when we first heard of Oven-Reddy. There remained only to test the device thoroughly. We gave it the most severe tests we could think of—and Oven-Reddy passed with flying colors.

"We're happy to offer it to our dealers as a feature on the leading automatic 'built-in' gas range on the market. And we're confident this improvement will be reflected in their sales."

★ ★ ★

There is little we can add to Mr. Klein's remarks. If you are handling Oven-Reddy, Mr. Dealer, you know this feature excites interest . . . closes sales. Insist on handling ranges with Oven-Reddy. Make your selling job easier. The Wilcolator Company, 1001 Newark Ave., Elizabeth, N. J. Canadian Plant: Mimico, Toronto, Ont.

## With Oven-Reddy . . .



Just set the dial for the temperature you want



Pop in your food or roast when the signal lights up



...and take it out—done to perfection!

**Wilcolator  
OVEN-REDDY**

"Takes the guess out of gas"

**Mallinckrodt**  
**ETHYL**  
**MERCAPTAN**  
purified

it says **LOOK OUT**

- The accepted standard odorant for natural or liquefied petroleum gas — gives sure but harmless warning.
- Purified — Moisture-free — **PROTECTS FIXTURES**. Meets all 15 qualifications of National Bureau of Standards.

**Mallinckrodt**

**MALLINCKRODT CHEMICAL WORKS**  
Mallinckrodt St., St. Louis 7, Mo.  
72 Gold St., New York 8, New York

**NEW**  
**KRUG**  
**VAPOR**  
**PUMP**

**COMPLETELY**  
**PORTABLE**

**LONG**  
**LIFE**

**SMALL**  
**IN**  
**SIZE**

**BIG**  
**IN**  
**PERFORMANCE**

**GREATER**  
**SAFETY**

**the LOW COST ANSWER for transferring L. P. GAS**

**SIMILAR MODELS**  
**AVAILABLE FOR**  
**TRANSFERRING**  
**ANHYDROUS**  
**AMMONIA AND**  
**AQUEOUS AMMONIA**

Here's the answer you've wanted for a long time . . . the New, KRUG Vapor Pump. Completely portable, safe, efficient, and built for long years of high quality service. Operates on the same, proven principle used in moving large quantities of L.P. Gas. But, in this compact unit, you get a faster rate of flow per H.P. used, and a better profit per dollar invested. In fact, a KRUG Pump doesn't cost . . . IT PAYS! Comes complete: specify either gasoline engine or electric motor equipped — or can be supplied for your own power source. Find out today about this new, low cost, answer for transferring L.P. Gas to tractors, trucks, mobile tanks, and many other applications.

**makers of famous KRUG HAND PUMP**

Pioneered for the small volume user of L.P. Gas, the KRUG Hand Pump is simple to operate, low in initial cost, built to high precision standards of the highest quality materials, by painstaking workmen. Users agree that it's the BEST hand-operated L.P. Gas pump available at any price. Every customer who uses L.P. Gases for engine fuel, flame throwers, home heaters, stock tank heaters, brooder stoves, etc., is a potential prospect for either the New KRUG Vapor Pump or the time-tested KRUG Hand Pump. Find out more about them!

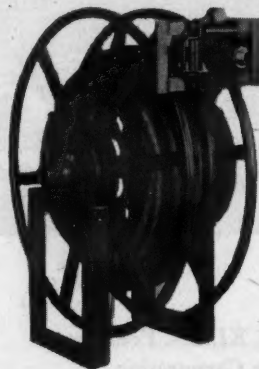
Ask Your Supply House or Write for Full Details to:

**D. H. KRUG COMPANY**  
Dept. BP94, Madison, South Dakota



the  
Pioneer  
in LOW  
COST L.P.  
Transfer  
Methods

**ACE**  
**HOSE REEL**  
for  
**Butane or Propane**



● **SPRING HOSE REEL**

ACE HOSE REELS save time, save money. Engineered to handle up to 50' of 1" material the ACE SPRING OPERATED HOSE REEL assures satisfactory performance. All pipe fittings are heavy duty steel and a Chiksan ball bearing swing joint is a component part of reel.

**ACE HOSE REEL CO.**  
5466 Alhambra Ave.  
Los Angeles 32, California

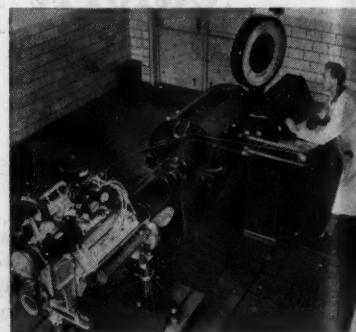
**Robertshaw-Fulton Opens Plant At Indiana, Pa.**

Robertshaw-Fulton Controls Co. is expanding its production facilities with the opening of a new plant at Indiana, Pa., 50 miles northeast of Pittsburgh. The company was constructed for Robertshaw-Fulton for the manufacture of certain new products now being readied for the market, according to company president, John A. Robertshaw.

**Chrysler Engine Makes Long Endurance Run**

Chrysler's engineering department reports the completion of a 1000-hour endurance run on a production model Ind. 24-A, 331 cu in. displacement Chrysler V-8 industrial engine. This engine has the same basic construction as the largest Chrysler passenger car engine.

The run, which was the equivalent of 90,000 passenger car miles at 80 miles per hour, was completed without interruption, on a 24-hour per day schedule five days per week. No service was required except for a



**Industrial engine on dynamometer during 1000 hour endurance test run at 3600 rpm under full load.**

change of oil at the end of each week, and an occasional change of spark plugs and adjustment of points.

It was stated that the engine delivered an average of 174 hp throughout the test, and that it was still in perfect operating condition in spite of the long run at 3600 rpm. The run was made to determine the suitability of the engine to drive electric generators, welding equipment, irrigation pumps, and other modern industrial equipment under similar operating conditions.

The Chrysler engineers explained that utilizing such an engine for industrial needs in comparison to diesel power reduces the size necessary by one-half, the weight by two-thirds, and the cost factor by three-quarters.

# BIG NEW MARKET!

# LPG HEAT FOR MOBILE HOMES!

Fast facts from Duo-Therm on the perfect opportunity to increase your LPG load

**FACT 1:** 800,000 mobile homes in the U. S.\* represent a virtually untapped market—a perfect way to increase your LPG load.

**FACT 2:** Owners want the comfort, convenience, and cleanliness of LPG heat. They cook with LPG. They want to heat with LPG. Now they can.

**FACT 3:** Duo-Therm Model 551 is the first, the only fully automatic gas heater specifically designed for mobile homes. It's priced right for trade-ins. Step into this market by sending the coupon today.

More than 350,000 warmly-satisfied mobile home customers

## Duo-THERM *Always the Leader*

\*Source: Mobile Homes Manufacturers Assoc.

Duo-Therm Div. of Motor Wheel Corp., Dept. BP-9, Lansing 3, Mich.

Rush me full technical information on Model 551. Also

☐ Price List ☐ Names and addresses of mobile home parks in my area.  
☐ Number of mobile homes in my counties. ☐ FREE 7 x 9 Duo-Therm Dealer decal.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

DUO-THERM is a registered trade mark of the Motor Wheel Corp., Copyright, 1964



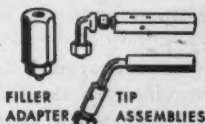
**MODEL 551**  
 40,000  
 BTU input.  
 48½" high  
 22" wide  
 14" deep.

# B-91

PROPANE  
TORCH

# Mutual

## YOUR FIRST CHOICE



**SOLDERING, BRAZING, SWEATING, MELTING**

The handiest torch you have ever seen. Especially useful for jobs where larger tanks or connecting hoses would hamper or endanger workmen. The B-91 Torch can be held in one hand with ease.

This Mutual Portable Torch is ready for instant use; generates in any weather. No pumping or priming. No warm up or sooting. Flame won't blow out. Easy and safe to light and control. Heats up to 2300 degrees F. Over 4½ hours continuous use in the cylinder. Fill it yourself for approximately ten cents—nothing to throw away. Cylinder meets ICC regulations and is equipped with fusible plug.

Try it! Get the complete B-91 Kit. Sell it on its labor saving merits. Sell it to plumbers, electricians, garages, linesmen and sheet metal shops. Display it in your store window. Use the B-91 as a leader; you'll be surprised with results. **SEND TODAY** for complete catalog and prices on all Mutual equipment.

Member L.P.G.A.

# INSTANT HEAT

**NO PUMPING - NO PRIMING**

# Mutual

LIQUID GAS EQUIPMENT CO., Inc.

3638 W. IMPERIAL HIGHWAY, INGLEWOOD, CALIFORNIA



## Protect Our

# Greatest Asset

By **Walter Naumer**  
Pyrofax Gas Corp.  
New York, N. Y.



**Walter Naumer**

It has been an axiom in the L. P. gas industry from its inception that the satisfied user of our product was of more value in attracting new customers than all the advertising and sales promotion combined. Probably the second L. P. gas customer, established so many years ago, bought because of the recommendation of the first user. Our present customers are our greatest asset.

Now that the industry has come of age and numbers its customers in the millions, it faces each year "normal losses" in its customer list running into a very substantial figure. Any L. P. gas marketer who has been in the business for a few years knows that these losses will range from 3 or 4% to as high as 9 or 10%, depending upon various circumstances.

Of course, not all these are permanently lost. A great many of them are in that large group who "moved." Some of these families will continue to use L. P. gas at their new location, and perhaps the new occupant of the home from which they moved will continue with the L. P. gas service.

Losses to city gas—either manufactured or natural—have been taken in stride ever since the business was conceived as "gas service beyond the mains." Experience has proved that pipeline extensions, while temporarily causing the loss of our users, inevitably result in building up additional pros-

*The accompanying thoughtful comment on the current competitive situation is reprinted from the April-May, 1954, issue of the Fisher LP-Governor, Fisher Governor Co., Marshalltown, Iowa. We direct your attention particularly to Mr. Naumer's remarks regarding the loss of LPG customers to electricity.—Ed.*

pects further out in the area to which city mains have been extended. At any rate, these customers remain in the gas industry.

Losses to other L. P. gases, (mostly due to the stupid "pirating" of customers) balance each other off although they generally hurt the industry. Losses due to death, destruction of houses, and other miscellaneous causes must be expected, and are generally something we can do nothing about.

The one most harmful loss in its ultimate effects is the loss of a good L. P. gas user to electricity. We know of too many cases where a former satisfied LPG customer, whose gas appliances—range, water heater, etc.—had become outmoded and inefficient, changed to the use of electricity because of the failure of the L. P. gas dealer to sell the user on the most modern, automatic gas appliance. While neglecting the "bird in hand" that same dealer undoubtedly spent considerable time, money, and effort in trying to gain new users as rapidly as possible. Some electric dealer fell heir to the sale of an electric range or water heater—generally at a price one and one-half to two-thirds as much as a comparable or better gas appliance would have cost the

customer, because of this most serious neglect.

The former L. P. gas customer has invested in a brand new, expensive electric appliance, which undoubtedly will give better service in the beginning than the obsolete gas appliance she discarded. Even for some time after the glamor of the electric story has worn somewhat thin by her own actual experience—breakdowns, costly repairs—it will be a long time before that family will be a good prospect for our industry again.

Meanwhile, how many of her friends and acquaintances, some of them present L. P. gas users or prospects for our service, will she have weaned away from us? That is why our losses to electricity—even though in some areas they may seem relatively small percentage-wise—are the most serious and are almost irretrievable.

There seems little doubt but that our biggest challenge and most important job is to solidify our position with existing L. P. gas users. We must assure ourselves that we are rendering the type of gas service that we boast about, that we do not permit the customer to go on using appliances that will not give the utmost satisfaction. We must see to it that the customer enjoys the benefits of all the conveniences and economy of L. P. gas, not only for the standard cooking, water heating, refrigeration, and space heating uses, but also the newer benefits of clothes drying, garbage and trash disposing, and the myriad other home and farm uses. Only by this means can we truly make the present customer an enthusiastic, really satisfied user, and protect our greatest asset.



# **Butane-Propane**

## **POWER SECTION**

**INSTALLATION • CARBURETION • SERVICING**



Driver Edna Lambardi operates one of the 13 propane taxicabs belonging to the Santa Monica Cab Co. in Santa Monica Calif.

*(For a story about this California cab company and its use of propane, turn to page 162)*

With 262,000 miles on its engine, a Santa Monica taxicab operating on propane still has its original spark plugs, pistons, rings and bearings. Although other cabs are traded in at the end of 100,000 miles, 1 million miles is the goal for this Ford.

## Taxi Totals 260,000 Miles In Durability Test



By Carl Abell

**A**FTER a total of 262,000 miles a taxicab engine, equipped with Dix carburetion system, has cost the Santa Monica Cab Co. only \$6.42 in maintenance costs. Five dollars of this was the standard labor charge for a factory overhaul, which was made at 250,000 miles. New water gaskets were required, and while the regulator was open new seats were installed in the primary and secondary regulator valves.

With this mileage a gasoline carburetor would have required from 10 to 15 overhauls, with possibly two or three complete replacements.

This cab company, located in Santa Monica, Calif., has a policy of trading in its cabs at the end of 100,000 miles. The one exception is a 1952 Ford V-8, which has been kept in service for a durability test on propane.

During the overhaul of this engine the cylinders were miked, and two pistons were pulled to check the condition of the connecting rod bearings. Wear on the cylinder walls was less than .004 in., and there were no perceptible ridges at the top of the piston stroke. The pistons were reinstalled with the original rings and bearings, all of which were found to be in good condition and showing only very slight wear.

Valves were still seating perfectly, although there was evidence of accumulation of slight deposits on the stems. The valves were not ground, as none showed any indications that

this was needed. After re-assembly the engine was given a strong treatment with gum solvent introduced through the carburetor to clean the valve stems, and then put back in service. Oil has been changed in this engine at 60,000-mile intervals.

It has been the practice of the Santa Monica Cab Co. to install spark plugs two numbers colder than the original factory equipment when the cabs are purchased. (Conversion to propane occurs before they are placed in service.) This quarter million mile engine is still operating on its first set of spark plugs, which are Champion J-8.

Until the engine was opened they had never been cleaned or regapped. In no case had the gap of any of the eight plugs increased more than .005 in. from the original setting of .030 in.

Compression tests indicated that these plugs could be expected to fail at high engine speeds and full throttle operation. Since the cabs are equipped with governors which hold the engine speed to a maximum of 2300 rpm, and the plugs were still performing satisfactorily in daily service, they were regapped and put back in the engine for further use.

Distributor points in this engine have required replacement at an average of 38,000 miles, which compares closely with the experience in the rest of the fleet. This is also considerably higher mileage than is experienced in most automobiles or

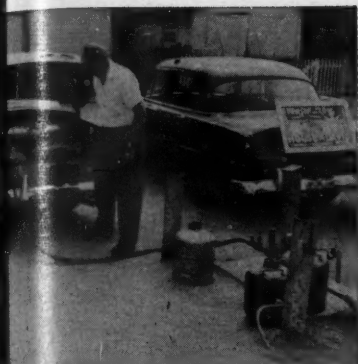
trucks even on propane. The reason advanced by Mr. Hoyt for this extremely good record is that the cab engines are governed to a relatively low speed and this, combined with the absence of high atmospheric temperatures in the seacoast location, keeps the operating temperature of the points unusually low.

The electrical system of the cab must also be maintained at very high efficiency, because with all lights and the two-way radio in operation the current draw is 54 amps. Failure of the electrical system would put the cab out of operation, which would not only entail expense of towing and repairs, but would cause loss of its normal revenue until it could go back on the street.

It is the company's policy to install new voltage regulators as soon as those in service begin to show signs of breaking down. They never attempt to repair the old regulators, in spite of the fact that the service mechanic, Charles Anderson, is a graduate of both Delco-Remy and Autolite service schools.

With defective electrical conditions removed, the company believes that the principle factor in the decline of breaker point efficiency is the oxidation of the contact surfaces. Pointing out the well-known chemical law that with every increase of 17° F the rate of oxidation doubles, Mr. Hoyt believes that the unusually low operating temperature of the engines is the





Filling a taxicab at company headquarters. It isn't known how the fuel mileage compares with gasoline in the present fleet, as these cabs have never run on gasoline.

It is not known how the fuel mileage compares with gasoline in the present fleet, as these cabs have never run on gasoline. Tests at the time the first units were converted showed no important difference in mileage, and it is believed that this condition holds true today. The present fleet, with the exception of the Ford V-8 which is on the endurance test, consists of Plymouth cars. The actual fuel mileage is not considered important in view of the fact that the cost per gallon for propane is less than half the cost with gasoline.

Mr. Hoyt points to the following savings in addition to the decreased cost of fuel: no engine operating on propane up to 100,000 miles has ever had to be taken out of service for valve grinds or any other form of major repairs. When the fleet was operating on gasoline, it was very seldom that an engine could go for 100,000 miles without at least one major overhaul, and valve grinds were quite frequent. Spark plugs formerly had to be replaced several times in each engine. They now last through the 100,000-mile period. Oil consumption has been brought down from 80 quarts to 14 quarts per week for the entire fleet, which has grown from 10 cabs in 1952 to 13 cabs now.

Some improvement in the operating results on gasoline could no doubt have been made through the use of the Clayton chassis dynamometer, which has been added to the company's service equipment since the fleet was converted. Part of the regular service routine now is a dynamometer test every 10,000 miles, for the purpose of setting the ignition timing to the point of maximum efficiency and making any refinements needed

*In the March, 1952, issue of BUTANE-PROPANE News (page 122) we presented a rather astonishing report of the operation of the Santa Monica Cab Co.'s 10-car fleet using propane. The 10 Ford cabs had operated a million miles without a valve grind or any other major engine maintenance operations. During an interview with Clayton R. Hoyt, owner and general manager of the company, we obtained the details of 30 additional months of operation to August, 1954.*

in the carburetor adjustments.

The dynamometer permits the duplication of road operating conditions without leaving the service yard, and shows the actual air-fuel-ratios at idling, part throttle, and full load conditions. The company feels that it is more important to make the settings rich enough for maximum engine life than to squeeze them down for maximum fuel economy and thereby risk early valve failures. The slight extra amount of fuel costs less than taking cabs out of service for repairs, and thereby losing the revenue that might have been obtained. When the carburetors have once been properly adjusted, they change very little through the life of the cars, but it takes only a few minutes when the car is on the dynamometer to check.

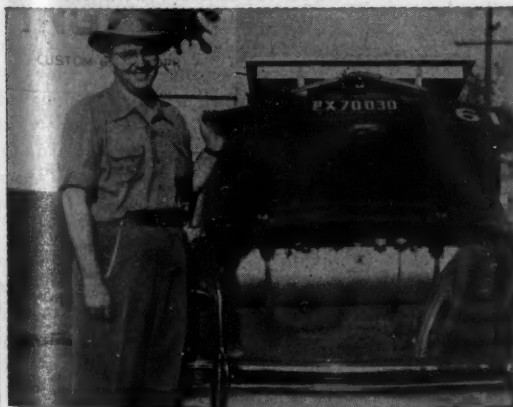
A service mechanic is kept on duty to take care of the daily maintenance requirements of the fleet, and any repairs that may be necessary.

**Left: C. R. Hoyt, owner and general manager of Santa Monica Cab Co., displays propane fuel tank in trunk of taxicab. Right: Typical carburetion unit used by the Santa Monica Cab Co. fleet.**

reason for the abnormally long life of the breaker points. In other engines that the company has converted, for outsiders, where operating conditions are closer to average, breaker point life has not been this good.

It is the company's intention to continue the test on the 1952 Ford V-8 up to one million miles. Oil will be changed at 60,000 miles, as in the past, and no repairs will be made on the engine until operating conditions indicate that they are necessary.

The engines in this fleet have not been altered in any way except to change to colder spark plugs and to add the Dix adapter type propane carburetors to the existing gasoline carburetors, and to equip the engines with governors. When the time comes to trade in the vehicles, the propane equipment and governors are removed for use on the new cabs, and the gasoline fuel system is put back in service. Since the engines are in perfect running condition, top trade-in prices are received.



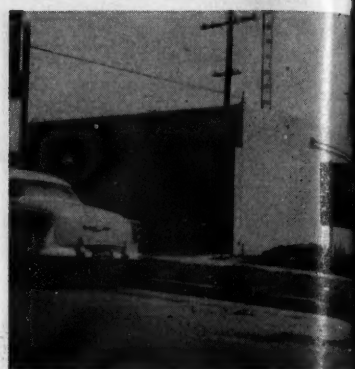
## Santa Monica Butane Co. Handles Carburetion and Fuel Sales

A subsidiary of Santa Monica Cab Co., (see page 162) this butane company is the only source of LPG for locomotive use in Santa Monica.

THE growing demand for carburetion conversions has lead to the formation of the Santa Monica Butane Co., operating at Santa Monica Cab Co. headquarters. And since the cab company's fleet service station is the only source of L. P. gas for locomotive

use available to the general public in Santa Monica, C. R. Hoyt has capitalized on these facilities.

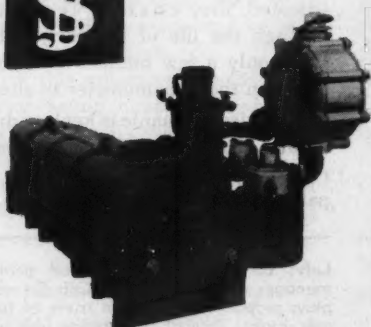
Fuel sales to the public have grown to between 20,000 and 25,000 gal. per month, and more than 400 carburetors have been installed for custom-



Large sign on vacant lot beside the Santa Monica Cab Co. building advertises carburetion service. Santa Monica Butane Co. was organized to take advantage of growing demand for carburetion conversions.

## EVER TANGLE WITH AN OCTOPUS?

- Too many lines
- Holes to drill
- Wires to install
- Bracket to make
- Big, heavy filter
- Expensive carburetor
- Replace air cleaner



J&S CHEVROLET KIT

## COMPARE J&S ENGINEERED KITS

- Quick, easy installation
- Only ONE hose to carburetor
- No extra water hoses
- No mounting holes to drill
- No bracket to make
- No solenoid valve or primer required

SANDWICH ADAPTER slips into middle of carburetor, affording low cost conversion to combination gas-gasoline operation.

CUSTOM DESIGNED casting houses thermostat and J&S vaporizer, and supports the complete unit, on front of engine block.

COMPLETE KIT includes vaporizer, regulators, filter, all needed bolts, gaskets, hoses, clamps, fittings, etc.

ENGINEERED for the particular motor to give top performance, power, and best gas economy. Unit is UL-listed, quality-manufactured. No leak-through, no freeze-up, no hazard.

COMPARE PRICES, cost of installation and operation, and YOU, TOO, WILL SWITCH TO J&S

**J&S. CARBURETOR COMPANY**  
P.O. BOX 10391 DALLAS, TEXAS  
"TWENTY YEARS IN GAS CARBURETION"



ers. These have been put on almost every conceivable type of vehicle, including trucks, tractors, American passenger cars from Willys to Cadillacs, and on MG, Jaguar, Sunbeam, Talbot, and Volkswagen foreign cars.

The Volkswagen car was one of the most interesting installation problems. It has an air-cooled engine, so there was no source of hot water for the vaporizer. This problem was met by bypassing oil from the crankcase through the vaporizer, connection being made to the bypass originally intended for an oil filter. Since the filter was not needed when operating on propane, a ready-made solution was at hand.

The introduction of four-barreled carburetors caught everybody in the industry unprepared with conversion equipment. One of the first Cadillacs in Santa Monica with the quad carburetor was brought in for conversion. Never one to turn down business, Mr. Hoyt did a little quick thinking and measuring. A cell the size of the airhorn, to which an adapter type carburetor could be attached, seemed to be a logical solution. To get a cell without loss of time, Mr. Hoyt went to a grocery store and started measuring the diameter of cans on the shelves. What was in the cans did not matter—proper diameter and height were what was wanted.

The grocer thought Mr. Hoyt was at least a little crazy, but a deal was finally consummated for a two-pound can of Crisco. The contents ended up in the Hoyt kitchen, and the can, after a little work with a can opener,

These sales inducements are brought to public attention frequently in three column, 9-in. ads in the *Santa Monica Outlook*, which is the leading newspaper in the city. Handbills with similar copy are also used at times, and there is a large sign on the lot beside the taxicab office advertising its Dix carburetion service.

Considerable fleet conversion business would be available except for the difficulty of providing fuel storage in the various company yards. Regulations covering the storage of

butane and propane within the city of Santa Monica are very severe, and there are only a limited number of locations where such storage is permissible under the local ordinance.

To meet this problem Santa Monica Butane Co. is building a 500-gal. delivery truck, with which it will be possible to fill the vehicle tanks direct at the beginning or end of each working day. Through the use of this truck, several dozen additional vehicles can be converted. Vehicles offering high fuel consumption, such

Sale of air cleaners is helped by the company's dynamometer which can give the customer a horsepower reading before and after installation. The meters give a direct reading of the increase in engine speed and horsepower.

tin snips, and a soldering iron, was converted into an adapter to which a standard Dix LPG carburetor could be attached.

The idle plate which goes between the carburetor and the manifold was cut by hand from a piece of 1/2-in. duralumin. Pride of paternity may have something to do with it, but Mr. Hoyt is convinced that his tin can for the Cadillac makes a better running job than has appeared in any of the factory-made adapters which have subsequently appeared on the market for the four barreled carburetors. At any rate the customer was happy. A flood of prospective conversions on Cadillacs, Lincolns, Chryslers and Oldsmobiles showed up at once, and Mr. Hoyt had 30 adapters made up by a local tinsmith from substantial sheet metal, using the crisco can for a model.

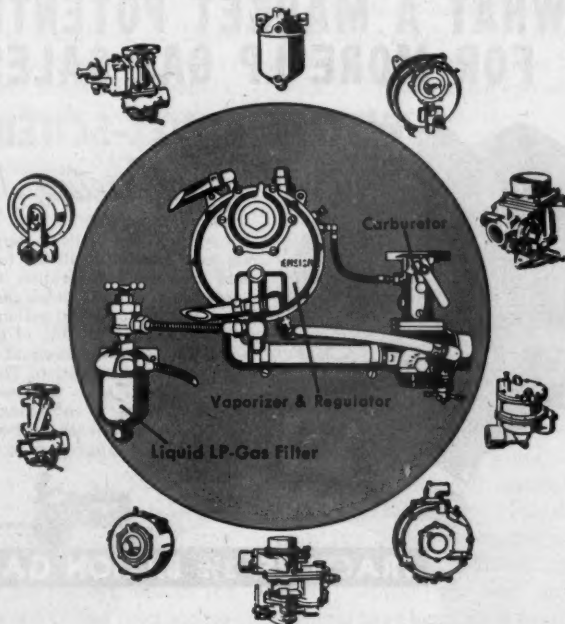
The Santa Monica Butane Co. is in a particularly good position to sell LPG carburetion effectively. The advantages can be described sincerely and with conviction, quoting the results of more than 4 1/2 million miles in the taxicab fleet. The company has also worked out a "pay as you drive" plan through which the savings in operating cost come close to meeting the payments as they come due.

As an extra inducement, the company gives 100 gal. of fuel free with each installation. In buying gasoline, this represents about \$30 in value to the customer, although it would cost him only \$19.50 in buying butane. The cost to Santa Monica Butane Co. is less than half of that amount, which they figure is low-cost promotion.

## LP-GAS CONVERSIONS

CALL FOR **ENSIGN** ....

THE CARBURETION TRACTOR BUILDERS CHOOSE



**MOST COMPLETE LINE 5-500 HORSEPOWER**

The Ensign carburetor you buy is a masterpiece when it comes to performance and quality of product. With Ensign you eliminate guess work. Take starting for example: the patented Ensign easy-starting device actually gives you a carburetor within a carburetor for starting only. Result—fast, easy starting with no flooding.

Ensign has pioneered in carburetion development for over forty years. Tell us your engine make, model and speed. We'll recommend the best equipment to do the job. Send for complete Ensign literature today.



**ENSIGN CARBURETOR COMPANY**

7010 S. Alameda St., P. O. Box 229, Huntington Park, California  
Branch Factory, 2330 W. 58th St., Chicago 36, Illinois

**DEALERS AND DISTRIBUTORS IN ALL PRINCIPAL CITIES**



as building material operations, will be sought for this service.

Conversion jobs turned out by the company shop are unusually attractive in appearance. The carburetor adapter and regulator come from the factory with a bright blue anodized finish. A vivid green vinyl plastic hose is used for the fuel tube between the regulator and the carburetor. This is cut from 3/4-in. garden hose. Dull red heater hose is used for the water lines, and the fuel line from the tank to the filter is protected by slip-

ping it through 3/8-in. garden hose, light blue in color. This is bargain counter hose, obtained several hundred feet at a time. Since its function is protective and ornamental, it is not necessary to use the high quality material that is required for the other hoses. As an interesting sidelight, the company has found that the vinyl plastic fuel hose, being smooth and glossy inside, generally gives from 3 to 4 additional horsepower as compared with the bellows type fuel tubes used on earlier installations.

Minimum conversion prices on single and double barrel automobile carburetors are \$225. The four barrel adaptation is priced at \$250. Truck installations generally entail extra cost because of the installation of extras which are recommended to increase power and improve economy. These may include high compression heads and cold manifolds, and air cleaners mounted outside the cowl. The latter generally develops from 6 to 10 more horsepower than can be had with air from under the hood. This same idea is being applied to passenger car installations by extending a flexible tube the size of the air inlet to an air cleaner mounted between the radiator and the grille.

#### Dynamometer

The sale of this profitable extra item is very easy with the dynamometer. If the customer is in doubt, he can be shown the horsepower reading on the dynamometer instruments, then without changing the load adjustment or throttle setting a tube is connected directly to the carburetor inlet and extended outside the hood. The meters give a direct reading of the increase in engine speed and horsepower.

The 400 carburetor installations made to date for outside customers represent additional gross income of approximately \$125,000, a tidy sum for the use of the service equipment which must be on hand for the maintenance of the taxicab fleet and the spare time of the mechanical staff. The extra overhead involved is nominal, so a healthy portion of the gross remains as net profit. The fuel sale to outside customers is nice also, because the storage must be there to service the taxicabs, and little extra expense is involved beyond the cost of the time required to pump the fuel.

This may turn out to be a case of the tail wagging the dog, but Mr. Hoyt feels that the problem of canine anatomy is not important as long as the profits hold up. After all, the purpose of business is to make profit, and this does it.

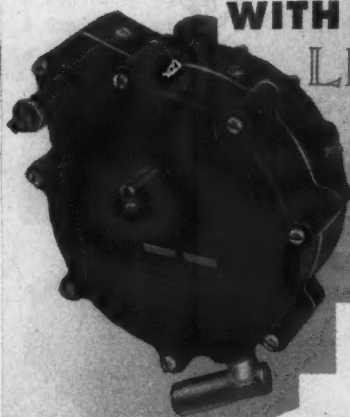
As a rule the man who talks the most about his rights is the one who does the least about his duties.

# 13,000,000,000 GALLONS PER YEAR\*

## WHAT A MARKET POTENTIAL FOR MORE LP GAS SALES!

### WITH MARVEL-SCHEBLER

### LPG Carburetion Systems



Look at these facts in terms of your own local market! If all the trucks, buses and tractors in operation today were converted to LPG, total gas consumption would be 13 billion gallons per year. Conversions on 50% of the nation's tractors alone would equal the present domestic consumption. The potential for LPG sales to these three big markets is enormous. Get your share with Marvel-Schebler LPG Carburetion Systems now!

**TRACTORS: 3 1/2 BILLION GALLONS\***

**TRUCKS: 8 1/2 BILLION GALLONS\***

\*Phillips Petroleum Co.

**BUSES: 1 BILLION GALLONS\***

Write Dept. BP-9  
Today For Our  
LPG Catalog!



**MARVEL-SCHEBLER Products Division**  
BORG-WARNER CORPORATION - DECATUR, ILLINOIS



# LPG Reduces Fire Hazard in Lumber Yard Fleet

By W. M. Massey

*Have you considered conversion of the power equipment of your local lumber yards as a market for butane-propane, and as a means of helping to balance your winter-summer load? Lumber yard operators lie awake nights worrying about fire. They all regard gasoline as a potent fire hazard. LPG is a safer fuel for their use, and their seasonal consumption is generally greater in summer than in winter.—Ed.*

LUMBER mill operators, both large and small, in the Deep South timber areas are turning to butane-propane gas as fuel for yard equipment such as hoists, carriers, trucks and tractors. Conversions of lumber yard motors, ranging from one to dozens in number, are of particular interest to local L. P. gas dealers as they provide a substantial sales account with year 'round operations. Some of the conversions are handled by local distributors with or without the assistance of a carburetor manufacturer's service representative.

One of the large conversions by a southern lumber mill is that of Allison Lumber Co., Bellamy, Ala., where every vehicle used on the yard, a total of 23, was converted two years ago. After a test of a few months in 1952, William Hayne, general superintendent, and C. A. Greenwood, yard superintendent, liked the performance and decided to convert all motors so that the use of gasoline on the yard could be eliminated.

The group of converted vehicles at Allison includes six Ross lifts and carriers, three Hyster fork lifts, four Yale units, six F-6 dump trucks, three

pick-ups and one personnel transport truck.

John Bates, consultant, of Memphis, Tenn., supervised the conversion at Allison shops with Budlock Refrigeration Supply Co., Birmingham, furnishing the conversion equipment. Tanks of 18 and 36-gal. capacity were used on the carriers and fork lifts, and trucks have 65-gal. capacity tanks.

Fuel supply is stored on the yard in two 1000-gal. capacity tanks equipped with Neptune meter and Louis Allis 30 gpm pump. The account is serviced by West Alabama Butane Co., York, which is Alabama's oldest butane dealer.

Safety from fire is one of the things Mr. Greenwood likes best about L. P. gas as fuel. All vehicles handle material in all parts of the yard, in storage sheds and at the planer mill. Fire hazards at a big lumber mill in the middle of a large timber tract are naturally a matter of major concern.

"We had to learn the characteristics of the fuel and how it should be handled for safety," Mr. Greenwood points out, "and in doing so we have come to feel that it is safer at a lumber yard than gasoline."

One accident off the yards did more than anything else to convince Mr. Greenwood of the safety of L. P. gas over gasoline. One of the trucks ran off a bridge and dropped into a rocky stream bed. The crash wrenched the 65-gal. capacity tank loose from the truck but there was no fire. The damaged tank was moved



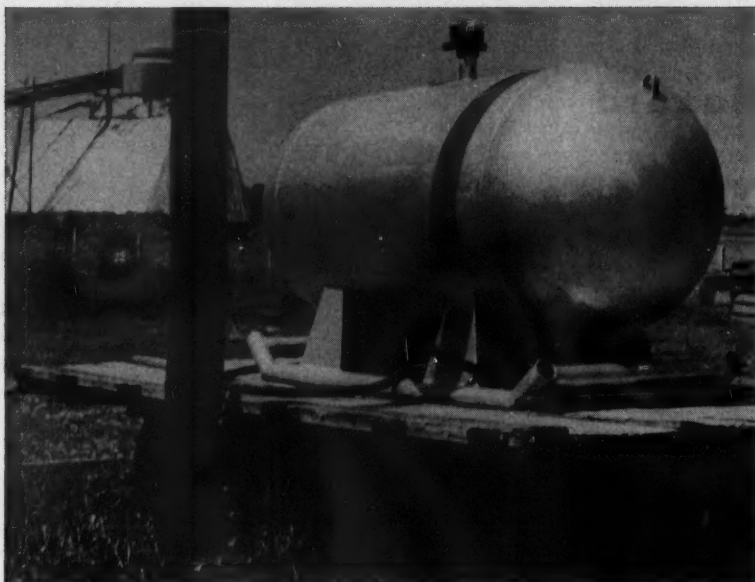
Tank of 18-gal. capacity is installed on straddle carrier belonging to Allison Lumber Co., in Bellamy, Ala.

to a safe place and the gas allowed to escape without harm. Had the truck been using gasoline, Mr. Greenwood thinks it would have caught fire, especially if gasoline had spread on the ground in the area.

Mr. Greenwood lets his motors idle while they wait, especially the hoist lifts and the straddle carriers which frequently stand by a few minutes while waiting to pick up material coming off the sorter or placing material at a finishing machine. "Formerly, with gasoline we had a lot of engine wear resulting from starting and stopping," Mr. Greenwood explains, "Now we just let them idle and we cut out a lot of racing and clutching besides saving wear on starter and electrical system."

Since conversion to LPG, the company has begun to construct a large mill. The work schedule of units has been stepped up and so many changes have been made from former operations using gasoline, that worthwhile fuel cost comparisons have not been feasible. Mr. Greenwood believes that even with the added idling time fuel costs are lower than what they would have been with gasoline.

Oil costs have been reduced to about one-fifth former costs and the time that units spend in the repair shop for motor work has dropped to almost half. It is far too early to arrive at any sort of estimate as to the increased life of the motors, but already Mr. Greenwood has concluded that the conversion costs, averaging \$245 per unit, have been saved.



Williams' Cedar Grove plantation has a portable tank which serves equipment in the field and cuts down on fueling time.

## Butane Fires Equipment On the Williams Plantation

**I**N northwestern Louisiana, near the old city of Natchitoches, the historical Cedar Grove plantation, operated by J. H. Williams, is opening the eyes of farmers to the value of butane-powered equipment for profitable farming and ranching.

The heart of this 9000-acre farm and ranch has been in the Williams family since it was deeded over to a Williams' ancestor by the representative of the king of Spain. It consisted of 7000 acres and the price was seven head of cattle—one for a thousand acres. Today more than 3000 head range the acres, and they wear the running "W" Williams' brand, burned with an iron heated by butane flames.

At the central headquarters of the six operating depots on the plantation is a 6000-gal. butane tank, furnished by Frank J. Robertson, owner of S & R Gas Co., Coushatta, La. When the plantation operates at the peak of the cropping season, it is necessary for S & R to refill this tank every five days.

What Mr. Williams is doing with butane on this plantation is supplying S & R Gas with practical demonstrations that help to sell farmers

throughout the company's delivery territory.

Cedar Grove plantation has credit for producing more bermuda grass hay annually than any other farm in the United States—150,000 bales. Most of it goes to fattening the marketable cattle. And butane is right in the middle of this tremendous hay production.

Tractors powered with butane pull the hay seeders when new areas are planted to grass; butane powers the harvesters when they cut the hay, and butane powers the balers when the cured hay is prepared for storage or market.

The plantation has eight tractors powered with butane. The oldest of these is said to be the first farm tractor converted in Louisiana. It switched to butane in 1946 and it still does a day's work every day. Each tractor carries a 30-gal. tank.

A butane-powered flame weeder removes grass and weeds from cotton and corn. The burner, hung on a steel framework and equipped to burn vegetation from four rows at a time without injuring the growing



J. H. Williams stands by one of the butane powered weed and grass burners regularly used on his plantation in northwestern Louisiana.



crop, is drawn by a butane-powered tractor. The gas for flaming the weeds is forced through a series of pipes to the outlets, which slide along on top of the ground. The flame spurts into the drill of the crop and burns the grass and weeds, thus eliminating the necessity of hoeing and reducing the number of plowings per crop. Several of these burners are on the plantation, and they consume 250 gal. of butane each per day when in constant use.

### Portable Tank

When working at a distance from the headquarters supply, the burners, as well as the tractors and other equipment, are serviced by a special tank built on a small four-wheel trailer. This trailer, hooked behind a truck or a tractor, may be pulled to any point on the plantation, where the fuel is transferred to tractors, flame weeders, branding irons or whatever other unit may need it.

"This trailer saves us a lot of time and money," Mr. Williams points out. "It's much cheaper to deliver the fuel to the equipment than to move the equipment to the main tank, particularly since some equipment works several miles from the central headquarters."

The butane-powered branding iron attracts amazed attention from everyone who sees it. Yet it is simple to operate and highly practical. It is light and portable, and the mounted butane tank supplies its fuel. It operates simply by drawing gas into a small metal oven with an open front, similar to a solderer's furnace. The branding irons are placed in this oven. In a moment an iron reaches branding heat.

### Instant Heat

The unit is used at a specific site until all cattle in the immediate area are branded, then it may be hauled to another branding site and be ready for operation instantly, whereas by the old method of heating the branding iron in an open fire, valuable time was wasted in getting a fire started and keeping it going. Furthermore, the iron heats several times quicker in the butane flame.

All new tractors now come butane-

equipped. Others are gradually being converted as time permits. Eventually some of the plantation trucks will be butane-powered, Mr. Williams says, although this is of secondary importance since most of the trucks are light and are fairly economical in use of gasoline.

"Our biggest trouble, with butane-powered equipment," says Mr. Williams, "is the lack of education of our tractor drivers. They don't know enough about the fuel. If one has a

flat tire, he's likely to blame it on the butane!

"The butane industry could increase its farm business 10 times over," he emphasizes, "if it would supply enough competent mechanics to service the farm equipment. We don't have a mechanic who knows enough about butane equipment, and we have difficulty getting a good mechanic from Shreveport when we need him. That means loss of time and costs money."

## Completely new METERING VALVE TYPE **CENTURY** DUAL CARBURETOR

BUILT  
ESPECIALLY

FOR JOHN  
DEERE TRACTORS



IT'S TWO CARBURETORS  
IN ONE!



#### NOT AFFECTED BY...

- ...temperature changes
- ...high or low altitudes
- ...changing gas pressures

#### BALANCES POWER of each cylinder.

GIVES BETTER fuel economy.

PERFORMS AT ALL speeds to pre-set perfection.

IDLES PERFECTLY.

GIVES INSTANT power—no choking or fluttering.

STARTS INSTANTLY upon installation.

NO MULTIPLE ADJUSTMENTS—tune up only.

Write for complete information today!

CENTURY GAS EQUIPMENT CO., 11188 Long Beach Boulevard, Lynwood, California

# **CENTURY**

- ★ SET IT!
- ★ SEAL IT!
- ★ FORGET IT!



LP-GAS CARBURETION



Buses converted to propane at the Meridian Transit Co. in Meridian, Miss.

only **WESTERN**  
tractor tanks  
give you all  
three of these  
important sales  
features . . .



Farmall — M Factory Cross-Mount

- 1** **Furnished in tractor's color**  
*Your customers prefer the added convenience and smart appearance of Western Tanks, furnished in appropriate tractor colors.*
- 2** **Factory design**  
*Assures your customers of a better fit without altering tractor. For instance, on the Farmall M Tank shown, you simply remove the gasoline tank, bolt this tank in place without moving air-cleaner or altering hood.*
- 3** **Greater capacity**  
*The 39 gallon capacity of the Farmall M Tank means your customers can run all day without refueling. Less stops and starts mean greater profits for him.*

Western Tank & Steel Corp. manufactures only Custom Tractor and Vehicle Motor Fuel Tanks. Design, engineering and construction can be, and are keyed to your customer's needs.

Write for complete price list and further information.

Regional distributorships still available in some sections of the country.



Phone 5-7517

Box 1013

Lubbock, Texas

## Propane Reduces Maintenance For Meridian

By W. M. Massey

**A**FTER operating its entire fleet of 19 buses—15 GMC's and four Macks—on L. P. gas for three full years, during which detailed records required of public utilities have been dutifully kept, the Meridian Transit Co., Meridian, Miss., has come to certain definite conclusions in favor of LPG over gasoline, which was formerly used.

Conversions were started experimentally in 1947 and, following a lengthy test period which was prolonged by lack of preliminary information on the technical aspects of conversion, the entire fleet was changed over in 1951. Change of fuel was made at the time of engine overhaul, so each engine record gives a clear-cut picture of the benefits obtained.

Conversion included increase in compression ratio by milling cylinder heads—as much as .175 in. on the larger engines, installation of cold manifolds, and installation of Century carburetion. LPG tanks of 49-gal. capacity were installed in the GMC buses, while the Macks were able to accommodate 60-gal. tanks.

Service Manager L. Cantrell provides the following information based on shop records: Miles per gallon on propane average the same for the fleet as was previously shown on gasoline. The engines start easier on propane; this is particularly noticeable and valuable on cold mornings. Maintenance of transmissions and drive lines is reduced. This is attributed to the smoother operation of the engines, particularly in the low speed range. With the high number of stops and starts in city bus service this is considered an item of major importance.

While it is still too early for the records to show the effect of the change of fuel on the life of the engines, measurements of wear on cylinder walls, pistons, and bearings indicate that the life of the Mack engines will be three times as long as on gasoline.

Oil drainage periods are set on the basis of laboratory analysis of samples drawn from the crankcases. On gasoline it was considered necessary to change oil at 1500 miles. On propane this has been stepped up to 8000 miles, and this determination is based more on the increase in viscosity of the oil than the breaking down or sludging of the oil. The 1950 average oil consumption of the fleet was 152 miles per quart. Two years later, with the entire fleet operating on propane, the average was up 247 miles per quart.

Overhauling and repairs of gasoline carburetors were formerly an important item of maintenance costs. There have been no repair costs on the propane carburetion equipment. Repairs resulting from starting the motors have been substantially reduced. This is attributed to the easier starting on propane.

The decrease in rate of wear on cylinders and piston rings has been phenomenal. The practice of reaming the top ridges from cylinder walls at the time of changing rings has been discontinued. During the earlier part of the three-year period on propane, engines were operated until the increase in oil consumption or drop in power indicated that major internal reconditioning was needed. Records show that one GMC went 122,900 mile on one set of rings. This is equivalent to much higher mileage in highway operation.

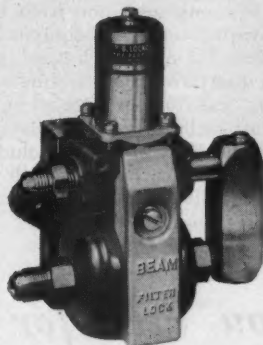
Another GMC, which was converted and re-ringed at 68,000 miles, had its second set of new rings installed at 225,000 miles. Another GMC went 212,000 miles on its original rings.

A Mack converted at 25,000 miles has gone 120,000 additional miles on two sets of rings and one valve grind. The presence of several broken rings in these jobs at the time of overhaul led the company to set up a preventive maintenance policy of changing rings arbitrarily at 75,000 miles.

The conversions were handled in the Meridian Transit Co. shops after the standard procedure was established. Two mechanics were able to handle a conversion a day, with equipment costs averaging \$250 per bus. Fuel is supplied by Fruge Suburban Gas Co., with one delivery every second day throughout the year.

# BEAM FILTERLOCK

BEST FOR ALL CARBURETOR CONVERSIONS



**FILTER and LOCKOFF  
in  
ONE  
COMPACT UNIT**

**Large Capacity — Heavy Duty**

Complete Kits For All L.P.G. Conversions

## FEATURES OF THE FILTERLOCK

- U.L. Approved LPG Valve
- U.L. Approved LPG Filter
- Sturdy aluminum alloy casting and bar stock manifold
- Unit reversible — right or left hand
- Connects easily to fuel lines
- Easy to clean and service

VOLTAGE — 6 or 12 Volt DC

WEIGHT — 2 3/4 lbs. as shown

SIZE — 5" Wide by 6 1/2" High

MODELS — 1102-A 3 6 volt small filter

1102-B 3 6 volt large filter

1104-A 3 12 volt small filter

1104-B 3 12 volt large filter

**Best Buy BEAM! THE PARKDALE COMPANY**  
Manufacturers of BEAM LPG PRODUCTS  
3040 ROSSLYN ST. • LOS ANGELES 65, CALIF.

Keep Up

with L.P. Gas

Developments

Every Month

## BUTANE-PROPANE *News*

B-P News brings you Facts, New Ideas, New Methods, News and Reports. You'll want to read every chapter in the Safety Series. Don't miss an issue!

**SUBSCRIBE TODAY**

## ● Subscription Order

BUTANE-PROPANE NEWS • 198 S. Alvarado St., Los Angeles 57, Calif.

Start my B-P News subscription with the ..... issue

☐ 1 Year \$2.00

☐ Payment Enclosed

☐ 2 Years \$3.00

☐ Bill Me

(Add \$2.00 per year foreign postage outside of U.S.A., Canada, & So. America)

NAME \_\_\_\_\_

MAIL ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

My connection with the LP-Gas Industry is \_\_\_\_\_



## Power Products

To secure further information on these products, refer to coupon on page 101.

### 18. Lightweight Engine

A compact lightweight engine built primarily for heavy duty truck operation has been announced by Hall-Scott Division of ACF-Brill Motors Co. This new model 590 cu in. displacement engine develops more than

200 hp, and is claimed to have the lowest power-weight ratio of any heavy duty truck engine. With a length of only 50 in., it is applicable for many replacements as well as for original equipment.

The new engines come from the factory with optional fuel equipment, developing 245 hp with butane, 226 hp with dual downdraft gasoline carburetion, and 192 hp with single downdraft carburetor for gasoline.

Standard LPG equipment includes a 2-in. Century carburetor, with or without a built-in Holly governor.

Hall-Scott Division  
ACF-Brill Motors Co.

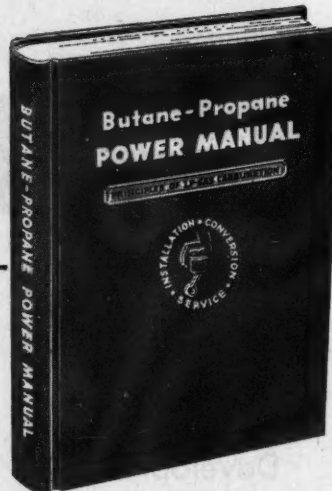
## The "Know-How" you need for Installations and Conversions

### Butane-Propane POWER MANUAL

Second Printing — Nov. 1953  
With Revisions

Published by

**BUTANE-PROPANE News**



Here is the first authoritative guide ever published for the rapidly expanding LPG power market. Basic facts of engines, fuel, and power are given in easy-to-understand language; then careful directions and clear illustrations take you step-by-step through installations, conversions, servicing . . . everything needed in a practical working manual for practical men. Nearly 5,000 copies of the BUTANE-PROPANE POWER MANUAL have already been sold.

- A De Luxe Edition in handy pocket-size, flexible binding. 23 Chapters, 334 Pages, Completely Illustrated.

#### OUTLINE OF CONTENTS

- |                                                    |                                                                     |
|----------------------------------------------------|---------------------------------------------------------------------|
| 1. The Nature of L. P. Gas                         | 13. Ignition Problems                                               |
| 2. Basic Engine Facts                              | 14. Tractor Conversions                                             |
| 3. Basic Facts of Fuel Combustion Engines          | 15. Truck and Bus Conversions                                       |
| 4. Factors Affecting Operating Economy and Power   | 16. Passenger Car and Taxicab Conversions                           |
| 5. L. P. Gas Carburetion Systems                   | 17. Industrial Engine Conversions                                   |
| 6. Regulating Gas Pressure and Temperature         | 18. Installing and Adjusting L. P. Gas Carburetion Systems          |
| 7. Fuel Supply System. Vehicle Tanks and Equipment | 19. Manufacturers' Instructions for Adjusting L. P. Gas Carburetors |
| 8. Natural Gas Carburetion                         | 20. Lubrication of L. P. Gas Engines                                |
| 9. Planning the L. P. Gas Installation             | 21. Trouble Shooting                                                |
| 10. Checking the Engine's Condition                | 22. Safe Storage and Handling of L. P. Gas                          |
| 11. Raising the Compression Ratio                  | 23. Selling L. P. Gas Carburetion Appendix (including Definitions)  |
| 12. Cooling the Intake Manifold                    |                                                                     |

Order Your  
Copy Now

**Price \$3.50**

(in California add 3% Sales Tax)

We pay postage on orders accompanied by remittance. Orders from individuals must be accompanied by amount of purchase unless credit has been established.

BUTANE-PROPANE News, 198 S. Alvarado St., Los Ang. 57, Cal.

### 19. Calculations

Corken's Inc., manufacturers of LPG and anhydrous ammonia pumps and compressors, has published a bulletin giving basic data and examples which will be useful in designing the piping and selecting the pump and compressor sizes for storage and transportation equipment for the handling of those products in liquid form.

Based on Fanning's equation, which is generally accepted by the petroleum industry for determining flow resistance to petroleum products, it accounts for the normal factors that enter into flow resistance problems, and gives tables which are useful in allowing for the variables. The calculations are based on the assumption that the pressure at the inlet of the pump is higher than the vapor pressure of the liquid, a condition which must exist in the pumping of volatile liquids.

Numerous typical problems show the method of applying the formula. Four tables and one chart giving pertinent data on butane and propane are included.

Corken's Inc.

### 20. Take-Off Drive

A new take-off drive developed by Stow Manufacturing Co. is described in bulletin No. 542. This drive, consisting of a 1 1/4-in. flexible shaft in combination with a square telescopic rod and tube, does away with delicate and expensive power couplers. It is being used on dump trailers, as well as to pump petroleum, natural gas, and other liquids.

Bulletin No. 542 gives complete measuring and ordering instructions for this drive.

Stow Manufacturing Co.

### 21. Vapor Pump Mounting

Corken's Inc., manufacturers of vapor compressors for LPG and anhydrous ammonia service, has issued a comprehensive bulletin on the mounting of compressors on the chassis of transport trucks moving those products.

Mountings between, outside, or above the frame rails are described and illustrated, giving details for the power-take-off and drive mechanisms. A separate section is devoted to the piping and accessories, with special emphasis on features to provide efficiency in both the transfer of the liquid and the servicing of the vapor pump unit.

Corken's Inc.

BUTANE-PROPANE News

## Post Office Purchases LPG Powered Trucks

U. S. post office has purchased two L. P. gas powered trucks for experimental postal route work in San Antonio, Texas.

Postmaster Dan Quill commented that his city is a logical one for giving L. P. gas a trial, since its operating problems are typical of most cities, and the area has a highly developed distribution system for L. P. gas.

The two L. P. gas trucks now in daily operation may be forerunners of hundreds of such postal trucks across the nation, states Superintendent of Transportation R. K. Taylor.

## New Form to Be Used In Reporting Fuel Tax

The Internal Revenue Service has a new form for use in reporting the federal motor fuel tax on L. P. gas. The form number will continue the same—Form 720—but a revision has been made in the form to handle the usage of special fuels in motor vehicles.

## Maryland Court Defines Use Tax Applications

The Court of Appeals of Maryland, in the case of Suburban Propane Gas Corp. vs Tawes, Comptroller, has held that the state use tax applies to cylinders, meters, regulators, valves and other miscellaneous items of equipment used in the sale of L. P. gas.

In reaching this conclusion the court found that these items of L. P. gas equipment do not qualify for exemption from the state use tax as being property used in manufacturing or compounding.

The court stated that the process involved in transforming L. P. gas from a liquid to a gas does not constitute manufacturing or compounding under the Maryland statute.

## Recent Louisiana Legislation

Prior to recent adjournment the Louisiana Legislature enacted the following bills: No. 266 revising the method of handling motor fuel use taxation of L. P. gas; No. 413 providing that L. P. gas tanks remain movable property when placed on land; and No. 321 exempting retail dealers of farm tractors using L. P. gas from the requirement of obtaining a permit.

Equipment  
for every  
LP-Gas  
conversion

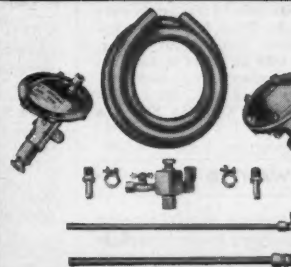
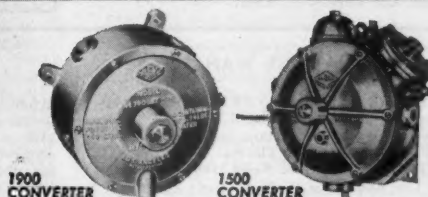
- ★ FORK LIFT TRUCKS
- ★ TRACTORS ★ TRUCKS
- ★ BUSES ★ TAXICABS
- ★ PUMPING STATIONS
- ★ STATIONARY ENGINES
- ★ PASSENGER CARS

You can always make the sale with the ALGAS line because ALGAS equipment meets all LP-Gas requirements and meets them correctly. Team up now with this proven sales leader!

**AMERICAN LIQUID  
GAS CORPORATION**

1109 Santa Fe Avenue  
Los Angeles, California

WITH  
**ALGAS**  
THE ONLY  
**COMPLETE LINE**



For vapor conversions, the Algas vapor conversion kit No. VK-115 is practical and economical. Liquid conversion kits also available.

TELL YOUR CUSTOMERS

**What's The Difference**

BETWEEN LP-GAS AND GASOLINE POWER!

**DIX BUTANE  
PROPANE CARBURETORS**  
WILL PROVE TO THEM WHAT A  
WHALE OF A DIFFERENCE LP-GAS  
POWER MAKES!



TELL YOUR CUSTOMERS how DIX LPG CARBURETION is simplest and easiest to install (any auto mechanic can install a DIX), how they can save 40% to 50% on operating costs, increase engine life 2 to 3 times longer, prolong use of motor oil 3 to 4 times, save 33% on fuel, greatly reduce maintenance, get smoother performance. DIX LP-Gas Carburetion permits use of either gasoline or LP-Gas whenever desired and many other advantages. Send for our free catalog and informative literature.

(Subject to Dealer Discounts)

**LIST PRICE INCLUDES—** Shut-off Valve  
• Mixer • Filter • Electric Solenoid Switch  
• Regulator • Ignition Seal and Rust Inhibitor  
• Idle Tube Adaptor and Connectors

**DIX MFG. CO.**

3447 E. Pico Blvd., Los Angeles 23



# CLASSIFIED Advertising

All Classified Advertising payable with order. Copy must reach publisher's office prior to the fifth of the month preceding publication. Address: Classified Advertising Material, BUTANE-PROPANE News, 198 S. Alvarado Street, Los Angeles 57, Calif.

## DISPLAY CLASSIFIED

\$12.00 a column inch per issue. Choice of 18, 14, 12, 10 pt display type for headlines. Set with 1 pt border. Maximum ad size 3". No cuts permitted. Publisher will set ad for maximum effect in space purchased.

UNDISPLAYED CLASSIFIED 15¢ a word. Set in 7 pt type without border. \$3.00 minimum charge per insertion. If Blind Box number card of B-P News is used, count as five words.

## SITUATIONS WANTED

12 YEARS SALES EXPERIENCE, IN APPLIANCES and LP Gas, both bulk and bottle. Several years as Sales Manager of large dealership. Desire position in Florida. Write Box 925, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

EXPERIENCED LP-GAS MAN DESIRES position as Service Manager with progressive organization; 7 years as Chief Repairman, 9½ years as Supt. of Service. Plant layout, piping, carburetion. Familiar with all types of distribution. A-1 references. Interview can be arranged. Willing to work hard. Box 915, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

## HELP WANTED

SEVERAL EXPERIENCED WHOLESALE LPG salesmen. Various parts country. College background. Write: Oil Industry Employment Service, 405 Tuloma Bldg., Tulsa, Okla.

## HELP WANTED?

A COMPANY SEEKING A BRANCH MANAGER and a salesman got 38 replies from one ad in the classified columns of BUTANE-PROPANE News... THE PLACE TO ADVERTISE FOR WHAT YOU WANT.

## SELL MORE with Display Classified Ads

This is an example of the attention getting type faces available in display ads in the BPN Classified Section. Cost is only \$12.00 a column inch per issue, an ad this size (3") is \$36.00. The large lines above are set in 18 pt. Other available sizes are shown below.

14 POINT DISPLAY  
12 POINT DISPLAY  
10 POINT DISPLAY

Body type is set in 7 pt like this sample. An average of 7 words to the line.

## LINES OFFERED

MANUFACTURER'S REPRESENTATIVES covering the heating trade in New England can give you results on SELLABLE lines through distributors and direct to the trade. (Gas lines are our specialty.) Northeast Utilities Equipment Corporation, 77 South St., Stamford, Conn.

## FOR SALE — TANKS & CYLINDERS

USED PROPANE STORAGE TANKS, 6000 gallons and larger, bought and sold! Azar & Associates, 1987 Connecticut Ave., Cincinnati 24, Ohio.

FOR SALE—THREE PROPANE STORAGE tanks manufactured by American Pipe & Steel Corp., 6500 W.G. capacity with fittings. Priced reasonably. Also available 1000 gal. Propane export skid tanks. Special prices 1-9, 10-40 lots. Box 95, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

## BUSINESS RECORD FORMS

BETTER BUSINESS RECORDS INCREASE your profits! They help improve your credit. In fact—good records actually help boost sales. That's one reason why KRAFTBILT LP-Gas forms are used by more dealers than any others. Simplify your office work—use KRAFTBILT simplified forms. Approved by your Association. Highly recommended by outstanding suppliers. Don't wait! Send postcard now for LP-Gas Forms Catalog. ROSS-MARTIN CO., P.O. Box 800-S, TULSA 1, OKLA.

## FOR SALE — MISCELLANEOUS

### FREE FREE FREE

With purchase of six (6) "Leak Detector Brushes" at \$3.75 each, Free: one gallon Detector Solution. For limited time. Gas Appliance Stores, Inc., Box 5057, Columbia, S. C.

IMMEDIATE DELIVERY 1949 CLASS VM-4 Gasair machine, capacity 10,000 CFM. New condition, used for stand-by purposes only. \$1,600 including all factory recommended spare parts. Olympic Gas Company, 1210 Water St., Port Townsend, Wash.

FOR SALE—IMMEDIATE DELIVERY! Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P. O. Box 396, Beloit, Wisconsin.

## WANT TO BUY a Bulk Plant or BOTTLED GAS BUSINESS?

A classified ad in BUTANE-PROPANE News will bring quick results at a minimum cost. Box 145 got 28 replies to his \$11 ad—less than 40¢ a reply!

## BUSINESS OPPORTUNITIES OFFERED

FOR SALE: BULK AND BOTTLE DELIVERY propane business for sale. Located in rapidly growing southwest city with wide mountain customer area. Reason for selling: ill health. Box 815, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

FOR SALE—VOTING STOCK IN ESTABLISHED bottled gas business serving over 2000 accounts through wholesale and retail operation. For further information write Box 920, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

SMALL L.P.G. BULK AND BOTTLE BUSINESS. Reasonably priced, located in Southeast, with wonderful opportunity for expansion. Cash or terms. Owner wishes to retire account ill health. Box 65, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

FOR SALE—LPG-CYLINDER AND BULK business, located in Southern California. Approximately 800 cylinder customers plus 200 bulk accounts. Business includes five trucks, storage, cylinder, filling and loading plants. Will sell or lease property to buyer. Box 910, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

## FOR SALE — TRUCKS - TRAILERS

TWO—1951 MODEL, 5100 GALLON water capacity, tandem wheel Propane transports. Twin tanks, \$4500.00 each. Mo. Hydro Gas Co. Inc., P.O. Box 88, Phone 2-0717, Springfield, Mo.

FOR USED PROPANE TRANSPORTS—2-5400 gallon w.c. U-68, 200 p.s.i. working pressure, twin barrel tandem axle semi-trailers, each \$3750. 1-5080 gallon w.c. U-69, 200 p.s.i. working pressure, twin barrel tandem axle semi-trailer, \$3250. 1-5974 gallon w.c. U-69, 200 p.s.i. working pressure, twin barrel tandem axle semi-trailer, \$4750. Units in good condition, ready for operation. Box 930, BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 57, Calif.

TANKS — TRANSPORT OR STORAGE, 1-250# pressure 3,168 gal. water cap., 1-250# pressure 3,830 gal. water cap., 1-250# pressure 6,108 gal. water cap. mounted on 33' 1945 Calahan 2 axle semi-trailer equipped with 100 GPM Smith pump, 5 HP explo. proof motor and 100' cable. 4-125# pressure spheres 1,958 gal. water cap. mounted on 35' 1946 Pike 2 axle semi-trailer. Will sell tanks with or without trailers. Allyn Tank Line, Inc., 14011 South Central Avenue, Los Angeles 59, Calif. Telephone NEVada 6-1871.

## HOW TO FIND A BUYER

You can do it quickly, inexpensively with a classified ad in BUTANE-PROPANE News.



## FOR SALE—TRUCKS-TRAILERS - Cont.

**TRINITY'S NEW EXCLUSIVE MODEL** #105 with sectional skirting - 1700 WG capacity W-250 - ICC MC-330 complete with pump, printometer, remote Okadee valves, clutch, power take-off and throttle. Completely installed on new factory LPG powered RP-162 International chassis. Immediate delivery, \$5,100.00 F.O.B. Trinity Steel Co., Inc., 3301 S. Lamar St., Hunter 8321, Dallas, Texas.

**BEFORE YOU BUY A NEW PROPANE** delivery truck, call us collect for prices. **IMMEDIATE DELIVERY, EASY TERMS.** Five Models to choose from, 600 to 2000 gallon. Furnished with or without truck. All makes and models of trucks are sold by us at prices that save you up to \$600.00. Our delivery trucks are being used the **WORLD OVER** by dealers large and small. **WHITE RIVER DISTRIBUTORS, INC.,** Phone 570, Batesville, Ark.

**COMPARE OUR PRICES!** New 1400 W. G. twin Model 100 propane tank, piped complete with Viking mechanical seal pump, P.T.O. and spline jack shaft, lights, filler hose, white enamel, Neptune No. 431 meter. Mounted on NEW, 1954 Chev. 2 ton, Model 6403, 2-speed axle, ready to use! \$4,195.00, excise tax paid. **EASY TERMS.** White River Distributors, Inc., Batesville, Ark.

**THIS IS IT—NEW 1954 INTERNATIONAL** RP-162, factory equipped for LPG, 2-speed axle, complete with 1400 W.G. twin Model 100 propane tank, Viking mechanical seal pump, filler hose, P.T.O. and spline shaft, piped complete, painted, clearance lights installed, \$4,095.00, excise tax paid. White River Distributors, Inc. Phone 570, Batesville, Ark.

**1700 W. G. TWIN MODEL 100 PROPANE** tank, P.T.O., spline shaft, Viking mechanical seal pump, Neptune No. 433. Print-O-Meter, complete, piped and installed on NEW 1954 International RP-162, LPG powered, long wheelbase, 2-speed axle, ready to use. \$4,790.00. **SAVE \$400.00 to \$800.00 on this unit. EASY TERMS.** **WHITE RIVER DISTRIBUTORS, INC.,** Batesville, Ark.

**THIS IS THE ONLY PROPANE TRUCK** ON THE MARKET TODAY with all of these features: Model 200 with rear cabinet which houses hose reel, meter, hose, and all control valves in rear for easy operation. Why have your meter, hose, reel, etc., installed on the side and have to drag the hose under, over or around truck to service customer that is on the "wrong side of the street"? This unit is available in sizes from 1250 to 1600 W. G. twin, with any make or model pump, meter, hose reel, etc., that you choose. **PRICE?** From \$100.00 to \$500.00 savings under competitive makes that do not have these features. **WEIGHT?** From 200 to 1000 lbs. under competitive makes that do not have these features. Call today. Easy terms! White River Distributors, Inc. Phone 570, Batesville, Ark.

**NEW: IMMEDIATE DELIVERY, 1400 WG** U69 propane extra lightweight twin barrel delivery unit. Mounted on new 1954 2-ton, 2-speed Chevrolet truck with big engine. Fill and vapor hose assemblies—Viking Mechanical Seal Pump—Power take-off assembly and motor fuel tank. **READY TO GO FOR \$3970.00 tax paid.** Also available at low extra cost: meters, fire extinguisher and L. P. carburetion. American Tank & Manufacturing Co., 2136 West Commerce Street, Dallas, Texas. P. O. Box 5525. Telephone Riverside 9183.

**REAL SAVINGS ON COMPLETE PACKAGE UNIT FOR IMMEDIATE DELIVERY.** 1400 WG U-69 twin delivery unit with trim skirting, mounted on new 1954 factory LPG powered International, RP-162 chassis. Two speed axle, 50-gallon recessed fuel tank, P.T.O., splines jack shaft, Viking mechanical seal pump, 50' filler hose and ICC lights. Painted gleaming aluminum over red oxide. Ready to start making you money for only \$4,085.00, including taxes, F.O.B. Denton. Meters, fire extinguisher and cabineting available at low extra cost. Call **NOR-TEX PRODUCTS COMPANY** collect, C-5416, Denton, Texas.

## FOR SALE—TRUCKS-TRAILERS - Cont.

**SPECIAL: AMERICAN "BETTER-BILT"** extra lightweight 1500 water gallon U69 propane twin barrel delivery unit, with Viking Mechanical Seal Pump—Neptune Print-O-Meter—fill and vapor hose assembly—mounted on new 1954 2-ton, 2-speed GMC chassis with 8.25 tires —**READY FOR SERVICE. PRICED AT \$4475.00 tax paid FOB Dallas.** Other sizes available at comparable low cost. American Tank & Manufacturing Co., 2136 W. Commerce Street, Dallas, Texas. P. O. Box 5525. Telephone Riverside 9183.

**FOR THE BIG HAUL . . . NEW 1800 WG** U-69 NOR-TEX twin delivery unit. Equipped for service with trim skirting, 50-gallon recessed fuel tank, ICC lights, Viking mechanical seal pump, P.T.O. and splines jack shaft. Mounted on brand new factory LPG powered International RP-172 chassis with the big 282 LPG engine. 5th overdrive transmission, two speed axle, 9:00 tires all around, heavy duty rear springs. All ready to start delivering gas for only \$5,125.00, including taxes, F.O.B. Denton. Call **NOR-TEX PRODUCTS COMPANY** collect, C-5416, Denton, Texas.

**BUYING YOUR FIRST DELIVERY** truck tank? Get the facts on Trinity's New Model #104 Twin 1400 WG capacity 250# WP complete with pump, printometer, hose, plumbing, etc., installed on new 1954 135 HP Chevrolet chassis—ready to haul gas today—\$4,300.00 F.O.B. Trinity Steel Co., Inc., 3301 S. Lamar St., Hunter 8321, Dallas, Texas.

**FROM JAPAN TO ITALY OUR TRUCKS** are known as the **WORLD'S FINEST.** All units are completely tested for performance and leaks by **PUMPING GAS** before they leave our shop. We train your drivers to use all equipment which you buy from us. We are in the gas business. Let our years of experience work for you and **SAVE YOU MONEY. IMMEDIATE DELIVERY—EASY TERMS.** White River Distributors, Inc., Batesville, Ark.

## PROFESSIONAL SERVICES

**ASSURE MORE PROFITS BY METHODS** developed over 26 years. Property appraisals. Revised sales plans. Floyd F. Campbell, Management Counselor, 821 Crofton Ave., Webster Groves, Missouri.

## SOLD AN LPG APPLIANCE BUSINESS COST—\$8.40

Just one 8-line classified ad in a single issue of **BUTANE-PROPANE News** sold this business. This is typical of the quick results you get from classified ads in **B-F News.**

## INDIVIDUALLY DESIGNED BULK PLANTS

H. Emerson Thomas  
& Assoc., Inc.  
Westfield, N. J.

## INSURANCE

## L. P. GAS INSURANCE

Have your agent write us about our Complete and Comprehensive Coverage for Adequate Limits of Liability at Reasonable and Normal Rates with Specialized Safety Engineering and Claim Service. Available only in Alabama, Arkansas, Arizona, Kansas, Louisiana, New Mexico, Oklahoma and Texas.

**PAN AMERICAN CASUALTY  
COMPANY**

T. E. Gammage, Sr., Pres.  
P.O. Box 1662 Houston, Texas

## New Mileage High For L. P. gas Busses

Transport companies operating busses on liquefied petroleum gas drove these busses to a new high of 60,537,447 total miles in 1953, results of a survey announced by the Liquefied Petroleum Gas Association reveal. Added to this new peak is an increase of over 16% in the amount of L. P. gas powered busses in operation at the close of 1953.

A total of 1663 busses were operating during 1953 with 411 contemplated additions to this growing fleet for 1954. The 411 L. P. gas busses on order for 1954 indicates the industry will have over 2000 busses in operation at the close of this year.

The poll was conducted by the LPGA market research committee headed by A. F. Smith, A. O. Smith Corp., Milwaukee, Wis., and controlled and tabulated by the new market research and statistical department of the LPGA. Thirty privately and municipally owned bus lines participated in the survey.

## Chicago Transit Authority Reports on Operations

According to the ninth annual report of the Chicago transit board of the Chicago Transit Authority, during 1953 the CTA substituted new motorbuses for streetcar service on five routes totalling 72.86 route miles. At the end of 1953 there were but five streetcar lines operating in the loop area, compared with 21 lines in 1945. Within a short time this may be reduced to two car lines.

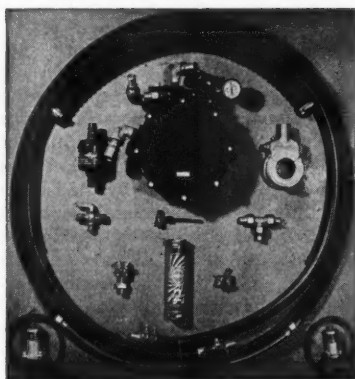
The extensive development of one-way street pattern, which has facilitated movement of auto and truck traffic in the downtown area, was made possible by the elimination of the streetcar tracks.

One hundred twenty-four new propane-burning busses were added to the CTA fleet during 1953, with 276 more on order and due for delivery during 1954. During July of this year CTA announced that the order had been placed for 100 additional propane fueled coaches, delivery to be made late this year.

Some 8,705,310 gal. of propane were consumed in CTA buses during 1953.

If all the after dinner speakers were laid end to end, it would be a good thing for the country.

—Will Rogers.



### NATIONAL LIQUID CAR AND TRUCK KIT

#1 - 2 5/16	\$73.65
#2 - 2 5/8	74.13
#3 - 3 1/16	76.63
#4 - 4	76.63

**KIT CONTAINS CONVERTER  
CARBURETOR ADAPTER  
STRAINER INSTALLATION  
KIT ELECTRIC SHUT-OFFS  
TRACTOR KITS**

**\$19.75 TO \$44.13**

Write, wire or call us for your National Catalog today. Contact our home office for available dealerships. THE COMPLETE LINE FOR BUTANE DEALERS.

### UNIVERSAL PRODUCTS, INC.

LPG Carburetion Division

6918 Lindberg Street, Houston 17, Texas



## More Power To You

**POWER** that packs a wallop... finer transportation that costs less per mile — both yours with an Ellis "Bu-Power" Manifold.

**ONE** installation will prove to you that no installation is complete without an Ellis "Bu-Power" Manifold.

In most cities, dial  
information for the  
number of  
Ellis Manifold  
Distributor

For additional  
details write

## ELLIS MANIFOLD CO.

2212-A EAST WASHINGTON BLVD.

LOS ANGELES 21, CALIF.

## ADVERTISERS

★ These advertisers carry additional information on their products in the 1954 Butane-Propane Catalog.

Ace Hose Reel Co.	158	Magic Chef, Inc.	113
Adams Brothers Mfg. Co., Inc.	150	Malleable Steel Range Mfg. Co.	20
*American Car & Foundry Co.	—	*Mallinckrodt Chemical Works	135, 153
*American Liquid Gas Corp.	173	Martin Stamping & Stove Co.	150
*American Meter Co., Inc.	59	*Marvel-Schebler Products Div.,	—
American Pipe & Steel Corp.	—	Borg-Warner Corp.	166
American Radiator & Standard	—	*Master Tank & Welding Co.	67
Sanitary Corp.	70	McNamar Boiler & Tank Co.	113
*Sunbeam Air Conditioner Div.	—	*Metalbestos Div.,	—
*American Tank & Mfg. Co.	125	William Wallace Co.	116
*Anchor Petroleum Co.	Third Cover	Minneapolis-Honeywell	—
*Anco Mfg. & Supply Co.	1	Regulator Co.	6, 7
Anthony Co.	—	*Mission Appliance Corp.	—
*Bagwell-General Steel Co.	136	*Mitchell Co., John E.	25
*Barber Gas Burner Co.	—	Moellenbrock & Wilke	156
*Bastian-Blessing Co., The	88, 89	Motorola Communications &	—
Beacon Petroleum Co.	87	Electronics, Inc.	18
Beard Co., Inc., The J. B.	14, 15	Motor Wheel Corp., Duo-Therm Div.	159
*Birmingham Stove & Range Co.	154	*Mutual Liquid Gas Equipment	—
Birmingham Tank Co., Div.	—	Co., Inc.	159
Ingalls Iron Works Co., The	—	National Council For LP Gas Promotion	139
*Black, Sivalis & Bryson, Inc.	133	Nelson, Ltd., Edward S.	—
*Brunner Mfg. Co.	124	*Neptune Meter Co.	—
*Beuhler Tank & Welding Works	120	*North Texas Tank Co.	10, 11
*Burnham Corp., Tank Div.	156	Ohio Foundry & Mfg. Co., The	129
*Butler Mfg. Co.	77	Ohio Injector Co.	79
Calor Gas Co.	22	*Okadee Co.	—
Caloric Stove Corp.	109	Parkdale Co., The	171
Carter Oil Co., The	112	*Pasley Mfg. & Dist. Co., The	132
*Century Gas Equipment Co.	169	Peerless Mfg. Corp.	123
*Charlotte Tank Corp.	—	*Philadelphia Valve Co.	75
*Chevrolet Motor Div.	—	Phillips & Buttorff Mfg. Co.	134
General Motors Corp.	97	Phillips Petroleum Co.	—
Cities Service Oil Co.	107	Pittsburgh Equitable Meter Div.,	—
Coleman Co., Inc., The	—	Rockwell Mfg. Co.	19, 69
*Columbian Steel Tank Co.	149	Powell Co., The William	63
*Corken's Inc.	142	*Pressed Steel Tank Co.	Second Cover
*Crane Co., The	152	Pure Oil Co., The	—
Crane Packing Co.	94	Radio Corp. of America	146
Dallas Tank Co., Inc.	122	*Ransome Co.	104
Davis Engineering Corp.	152	Rector Well Equipment Co.	148
Dearborn Stove Co.	—	Remington Rand, Inc.	—
*Delta Tank Mfg. Co., Inc.	85	Reo Motors, Inc.	—
*Detroit-Michigan Stove Co.	23, 55	Reznor Mfg. Co.	108
Dix Mfg. Co.	173	*Rheem Mfg. Co.	28
Dixon Valve & Coupling Co.	114	Richardson Gasoline Co., Sid	53
Div. of Pressed Steel Tank Co.	—	*Robertshaw-Fulton Controls Co.	—
Drake & Townsend, Inc.	154	Robertshaw Thermostat Div.	121
duPont de Nemours & Co., Inc.,	—	*Rockwell Mfg. Co., Pittsburgh	—
E. I., Fabrics Div.	—	Equitable Meter Div.	19, 69
Ellis Manifold Co.	176	Rockwood Sprinkler Co.	131
Empire Stove Co.	105	Roper Corp., Geo. D.	57
*Ensign Carburetor Co.	165	Royston Laboratories, Inc.	—
Fairbanks, Morse & Co.	97	Ruud Mfg. Co.	137
Filter-Soft Corp.	156	*Scaife Co.	Front Cover
*First Acceptance Corp.	128	*Schirmer-Dornbier Pump Co., The	118
*Fisher Governor Co.	103	*Selwyn-Pacific Co.	140, 141
*Flint Steel Corp.	138	Servel, Inc.	—
Ford Motor Co.	117	Sequoia Mfg. Co.	30
Gas Appliances Mfg. Assn., Inc.	8, 9	Sinclair Oil & Gas Co.	147
*General Controls Co.	61	Skelly Oil Co.	145
*General Gas Light Co.	91	*Smith Precision Products Co.	17
General Water Heater Corp.	35	Span Brass Mfg. Co.	150
Griffiths Co., The E. F.	154	*Sprague Meter Co.	143
Grinnell Co., Inc.	—	Stewart-Warner Corp.,	—
H & H Equipment Co.	—	U. S. Machine Div.	106
Handbook Butane-Propane Gases	—	*Stampings, Inc.	—
Hannay & Son, Inc., Clifton B.	93	Steel Cooperaage Div., Serrick Corp.	144
Harzer-Wyman Co.	4, 5, 73	Superior Tank & Construction Co.	36
Holly Mfg. Co.	—	*Superior Valve & Fitting Co.	98
Harrisburg Steel Corp.	—	*Tappan Stove Co., The	151
Holsclaw Bros., Inc.	—	*Temco, Inc.	26, 27
Home Gas Equipment Co.	—	*Trageser Copper Works,	—
Hunt Heater Corp.	83	Inc.	Fourth Cover
International Harvester Co.	—	Trinity Steel Co., Inc.	153
Janitrol Heating & Air Cond. Divs.	—	Tuloma Gas Products Co.	32
Surface Combustion Corp.	111	*Union Carbide & Carbon Corp., The	—
*Johnson Gas Appliance Co.	—	Linde Air Products Co. Div.	16
Johnson Machine Shop	—	*United Petroleum Gas Co.	—
Johns-Manville Corp.	—	*United States Rubber Co.	24
*J & S Carburetor Co.	164	Universal Products, Inc.	—
Krug Co., D. H.	158	Utility Appliance Corp.	31
Leland Electric Co., The Div. Ameri-	—	Vicksburg Tank Co., Inc.	—
can Machine & Foundry Co.	—	*Viking Pump Co.	102
*Lin'le Air Products Co., Div. of	—	*Warren Petroleum Corp.	3
Union Carbide & Carbon Corp.	16	*Weatherhead Co., The	12, 13
Locke Stove Co.	115	Weldit Inc.	95
*LPG Credit Corp.	127	Western Tank & Steel Corp.	170
Lubbock Machine & Supply Co.	21	White Products Corp.	—
		White River Distributors, Inc.	130
		Wilcolator Co., The	157
		*William Wallace Co., Metalbestos Div.	116
		*Wolverine Tube Div. of Calumet	—
		& Hecla, Inc.	65
		*Wood Co., John, Heater & Tank Div.	—
		*Wood Mfg. Co., A. R.	152